# MHC-DP1000D

# SERVICE MANUAL

**Ver 1.0 2001. 09**

*US Model*
*Canadian Model*
*AEP Model*
*UK Model*
*E Model*
*Australian Model*

- MHC-DP1000D is composed of following models.
  As for the service manual, it is issued for each component model, then, please refer to them.

## COMPONENT MODEL NAME

| | | | |
|---|---|---|---|
| DVD DECK RECEIVER SYSTEM | | HCD-DP1000D | |
| FRONT SPEAKER | | SS-DP1000DW (US,CND,AEP,UK)<br>SS-DP1000D (EXCEPT US,CND,AEP,UK) | |
| SPEAKER SYSTEM | SS-RC270 | REAR SPEAKER | SS-RS270 |
| | | CENTER SPEAKER | SS-CT270 |

## SPECIFICATIONS

**General**

| | |
|---|---|
| Power requirements | |
| North American model: | 120 V AC, 60 Hz |
| European model: | 230 V AC, 50/60 Hz |
| Australian model: | 230 – 240 V AC, 50/60 Hz |
| Mexican model: | 120 V AC, 60 Hz |
| Thailand model: | 220 V AC, 50/60 Hz |
| Indian, Pakistani, Moroccan and Tunisian models: | 220 V AC, 50/60 Hz |
| Other models: | 120 V, 220 V or 230 – 240 V AC, 50/60 Hz<br>Adjustable with voltage selector |
| Power consumption | |
| U.S.A. model: | 205 watts |
| Canadian model: | 205 watts |
| European model: | 190 watts<br>0.5 watts (at the Power Saving Mode) |
| Other models: | 225 watts |
| Dimensions (w/h/d) | Approx. 280 x 360 x 365mm |
| Mass | |
| North American and European models: | Approx. 11.0 kg |
| Other models: | 12.0 kg |
| Supplied accessories: | AM loop antenna (1)<br>FM lead antenna (1)<br>Remote commander (1)<br>Batteries (2)<br>Video cable (1)<br>Front speaker pads (8)<br>Center and rear speaker pads (12) |

Design and specifications are subject to change without notice.

• Abbreviation

| | |
|---|---|
| CND: Canadian model | E91 : 220V AC area model |
| SP : Singapore model | AUS: Australian model |
| MY : Malaysia model | MX : Mexican model |
| EA : Saudi Arabia model | TH : Thai model |

## PARTS LIST

| Part No. | Description | Remark |
|---|---|---|
| | ACCESSORIES<br>********** | |
| 1-476-445-11 | REMOTE COMMANDER (RM-SD270) | |
| 1-501-374-11 | ANTENNA, LOOP | |
| 1-501-594-11 | ANTENNA (FM)(AEP,UK) | |
| 1-501-659-71 | ANTENNA (FM)(EXCEPT AEP,UK) | |
| 1-558-848-11 | CORD, SPEAKER (SS-DP1000D/DP1000DW)(3m) | |
| 1-769-433-11 | CORD, SPEAKER (SS-RS270) (10m) | |
| 1-769-433-41 | CORD, SPEAKER (SS-CT270) (2.5m) | |
| 1-782-981-21 | CORD, CONNECTION | |
| 4-210-254-01 | CUSHION (FOOT) | |
| 4-232-032-01 | COVER, BATTERY (FOR RM-SD270) | |
| 4-232-734-11 | MANUAL, INSTRUCTION (SS-DP1000DW) (ENGLISH,FRENCH,GERMAN,SPANISH,DUTCH,SWEDISH, ITALIAN,PORTUGUESE,TURKISH,POLISH,HUNGARIAN, GREEK,FINNISH,DANISH,CZECH,RUSSIAN) | |
| 4-232-961-01 | FOOT (SS-RC270) | |
| 4-236-762-11 | MANUAL, INSTRUCTION (ENGLISH) | (US,CND,UK,AUS,E91,EA) |
| 4-236-762-21 | MANUAL, INSTRUCTION (FRENCH)(CND,EA) | |
| 4-236-762-31 | MANUAL, INSTRUCTION (SPANISH)(MX) | |
| 4-236-762-41 | MANUAL, INSTRUCTION (ENGLISH,FRENCH,SPANISH) | (AEP,E) |
| 4-236-762-51 | MANUAL, INSTRUCTION (GERMAN,DUTCH,ITALIAN)(AEP) | |
| 4-236-762-61 | MANUAL, INSTRUCTION (SWEDISH,POLISH)(AEP) | |
| 4-236-762-71 | MANUAL, INSTRUCTION (ARABIC)(EA) | |
| 4-236-762-81 | MANUAL, INSTRUCTION (TRADITIONAL CHINESE)(SP,MY) | |
| 4-236-763-11 | MANUAL, INSTRUCTION (DANISH,FINNISH)(AEP) | |
| 4-236-763-21 | MANUAL, INSTRUCTION (PORTUGUESE)(AEP) | |
| 4-236-763-31 | MANUAL, INSTRUCTION (GREEK)(AEP) | |
| 4-236-763-41 | MANUAL, INSTRUCTION (HUNGARIAN,CZECH)(AEP) | |
| 4-236-763-51 | MANUAL, INSTRUCTION (TURKISH)(AEP) | |
| 4-236-763-61 | MANUAL, INSTRUCTION (SLOVAK)(AEP) | |
| 4-236-764-11 | MANUAL, INSTRUCTION (ENGLISH,THAI)(TH) | |

# MINI Hi-Fi COMPONENT SYSTEM

**9-873-315-01**
2001I0200-1
© 2001.9

**Sony Corporation**
**Home Audio Company**
**Sinagawa Tec Service Manual Production Group**

SONY®

## REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

| Ver. | Date | Description of Revision |
|---|---|---|
| 1.0 | 2001.09 | New |
| | | |
| | | |
| | |

# HCD-DP1000D

# SERVICE MANUAL

Self Diagnostics Supported model

**Ver 1.8 2003.12**

PHOTO :E model

*US Model*
*Canadian Model*
*AEP Model*
*UK Model*
*E Model*
*Australian Model*

- HCD-DP1000D is the tuner, deck, DVD and amplifier section in MHC-DP1000D.

| | | |
|---|---|---|
| DVD Section | Model Name Using Similar Mechanism | NEW |
| | DVD Mechanism Type | CDM58D-DVBU9 |
| | Base Unit Name | DVBU9 |
| | Optical Pick-up Name | KHM-240AAA/CLNP |
| Tape deck Section | Model Name Using Similar Mechanism | HCD-DP800AV |
| | Tape Transport Mechanism Type | TCM-230AWR41/MWR41 |

## SPECIFICATIONS

### AUDIO POWER SPECIFICATIONS: (USA model only)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

with 8 ohm loads both channels driven, from 120 Hz – 10 kHz; rates 100 watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 milliwatts to rated output.

Continuous RMS power output
Center speaker: 30 watts
Rear speakers: 30 + 30 watts
(8 ohms at 1 kHz, 10% THD)

### Amplifier section

**Canadian model:**

Continuous RMS power output (reference)
Front speaker: 100 + 100 watts
Center speaker: 30 watts
Rear speakers: 30 + 30 watts
(8 ohms at 1 kHz, 10% THD)
Total harmonic distortion less than 0.07%
(8 ohms at 1 kHz, 70 W)

**European model:**

DIN power output (rated) 60 + 60 watts
(8 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
Front speaker: 80 + 80 watts
Center speaker: 30 watts
Rear speakers: 30 + 30 watts
(8 ohms at 1 kHz, 10% THD)

Music power output (reference)
Front speaker: 150 + 150 watts
Center speaker: 60 watts
Rear speakers: 60 + 60 watts
(8 ohms at 1 kHz, 10% THD)

**Other models:**

The following measured at AC 120, 220, 240 V, 50/60 Hz
DIN power output (rated) 90 + 90 watts
(8 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
Front speaker: 120 + 120 watts
Center speaker: 40 watts
Rear speakers: 40 + 40 watts
(8 ohms at 1 kHz, 10% THD)

Inputs
GAME IN: voltage 250 mV,
(phono jacks) impedance 47 kilohms
MD (VIDEO) IN: voltage 450 mV/250 mV,
(phono jacks) impedance 47 kilohms
OPTICAL IN:
(Square optical connector jacks, front panel)
wavelength ——
MIC: sensitivity 1 mV,
(Except for North American and European models) impedance 10 kilohms
(phone jack)

— Continued on next page —

## MINI HI-FI COMPONENT SYSTEM

**9-873-314-09**
2003L02-1
© 2003.12
**Sony Corporation**
**Home Audio Company**
**Published by Sony Engineering Corporation**

SONY®

Outputs

| | |
|---|---|
| MD (VIDEO) OUT: | voltage 250 mV |
| (phono jacks) | impedance 1 kilohms |
| VIDEO OUT: | max. output level |
| (phono jack) | 1 Vp-p, unbalanced, Sync negative, load impedance 75 ohms |
| S-VIDEO OUT: | Y: 1 Vp-p, unbalanced, |
| (4-pin/mini-DIN jack) | Sync negative, C: 0.286Vp-p, load impedance 75 ohms |
| PHONES: | accepts headphones of |
| (stereo mini jack) | 8 ohms or more |
| FRONT SPEAKER : | accepts impedance of 8 to 16 ohms |
| REAR SPEAKER: | accepts impedance of 8 to 16 ohms |
| CENTER SPEAKER: | accepts impedance of 8 to 16 ohms |
| SUB WOOFER: | Voltage 1 V, impedance 1 kilohms |

## DVD player section

| | |
|---|---|
| Laser | Semiconductor laser (DVD: λ =650 nm, CD: λ =780 nm) Emission duration: continuous |
| Frequency response | DVD (PCM 48 kHz): 2 Hz – 22 kHz = (±1 dB) CD: 2Hz – 20 kHz = (±1 dB) |
| Signal-to-noise ratio | More than 90 dB |
| Dynamic range | More than 90 dB |

Video color system format

NTSC, PAL

DIGITAL OUT OPTICAL

(Square optical connector jack, rear panel)

| | |
|---|---|
| Wavelength | 660 nm |

## Tape player section

| | |
|---|---|
| Recording system | 4-track 2-channel stereo |
| Frequency response | 40 – 13,000 Hz (±3 dB), |
| (DOLBY NR OFF) | using Sony TYPE I cassette, 40 – 14,000 Hz (±3 dB), using Sony TYPE II cassette |

## Tuner section

FM stereo, FM/AM superheterodyne tuner

## FM tuner section

| | |
|---|---|
| Tuning range | 87.5 – 108.0 MHz |
| Antenna | FM lead antenna |
| Antenna terminals | 75 ohm unbalanced |
| Intermediate frequency | 10.7 MHz |

## AM tuner section

Tuning range

| | |
|---|---|
| Pan American model: | 530 – 1,710 kHz (with the interval set at 10 kHz) 531 – 1,710 kHz (with the interval set at 9 kHz) |

European and Middle Eastern models:

| | |
|---|---|
| | 531 – 1,602 kHz (with the interval set at 9 kHz) |
| Other models: | 531 – 1,602 kHz (with the interval set at 9 kHz) 530 – 1,710 kHz (with the interval set at 10 kHz) |
| Antenna | AM loop antenna |
| Antenna terminals | External antenna terminal |
| Intermediate frequency | 450 kHz |

## General

Power requirements

| | |
|---|---|
| North American model: | 120 V AC, 60 Hz |
| European model: | 230 V AC, 50/60 Hz |
| Australian model: | 230 – 240 V AC, 50/60 Hz |
| Mexican model: | 120 V AC, 60 Hz |
| Thailand model: | 220 V AC, 50/60 Hz |

Indian, Pakistani, Moroccan and Tunisian models:

| | |
|---|---|
| | 220 V AC, 50/60 Hz |
| Other models: | 120 V, 220 V or 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector |

Power consumption

| | |
|---|---|
| U.S.A. model: | 205 watts |
| Canadian model: | 205 watts |
| European model: | 190 watts 0.5 watts (at the Power Saving Mode) |
| Other models: | 225 watts |
| Dimensions (w/h/d) | Approx. 280 x 360 x 365mm |

Mass

North American and European models:

| | |
|---|---|
| | Approx. 11.0 kg |
| Other models: | 12.0 kg |
| Supplied accessories: | AM loop antenna (1) FM lead antenna (1) Remote commander (1) Batteries (2) Video cable (1) Front speaker pads (8) Center and rear speaker pads (MHC-DP1000D only, 12) |

Design and specifications are subject to change without notice.

**SAFETY-RELATED COMPONENT WARNING!!**

**COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.**

**ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!**

**LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.**

**NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT**

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

**NOTES ON LASER DIODE EMISSION CHECK**

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

**CAUTION**
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

### Notes on chip component replacement

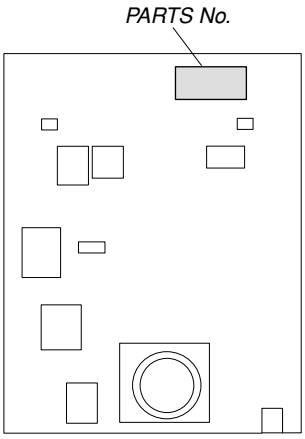
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

### Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

## MODEL IDENTIFICATION

*— BACK PANEL —*




| MODEL | PARTS No. |
|---|---|
| US model | 4-236-826-0☐ |
| CND model | 4-236-826-1☐ |
| AEP, UK model | 4-236-826-2☐ |
| SP, MY model | 4-236-826-3☐ |
| E model | 4-236-826-4☐ |
| MX model | 4-236-826-5☐ |
| EA model | 4-236-826-6☐ |
| AUS model | 4-236-826-7☐ |
| TH model | 4-236-826-8☐ |
| E91 model | 4-236-826-9☐ |

- Abbreviation
  CND : Canadian model
  MX : Mexican model
  SP : Singapore model
  MY : Malaysia model
  AUS : Australian model
  EA : Saudi Arabia model
  TH : Thai model
  E91 : 220V AC area model

## SAFETY CHECK-OUT (US model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

## LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

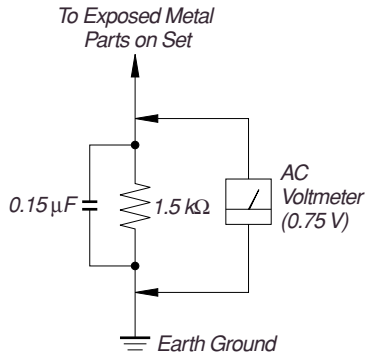



*Fig. A. Using an AC voltmeter to check AC leakage.*

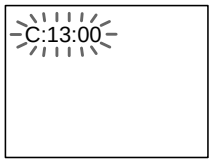
### Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

## Self-diagnosis function

**(When letters/numbers appear in the display)**

When the self-diagnosis function is activated to prevent the system from malfunctioning, a five-character service number (e.g., C 13 00) with a combination of a letter and digits appears on the screen. In this case, check the following table.




| First three characters of the service number | Cause and/or Corrective Action |
|---|---|
| C 13 | The disc is dirty<br>➡Clean the disc with a soft cloth (page 54). |
| C 31 | The disc is not inserted correctly.<br>➡Re-insert the disc correctly. |
| E XX<br>(XX is a number) | To prevent a malfunction, the system has performed the self-diagnosis function.<br>➡Contact your nearest Sony dealer or local authorized Sony service facility and give the 5-character service number.<br>Example: E 61 10 |

## • DISC TRAY LOCK

The disc tray lock function for the antitheft of an demonstration disc in the store is equipped.

**Releasing Procedure :**

1. Press three buttons of [PLAY MODE] , [■] and [◀◀] simultaneously.
2. The message “UNLOCKED” is displayed and the tray is unlocked.

**Note :** When “LOCKED” is displayed, the tray lock is not released by turning power on/off with the [POWER] button.

## TABLE OF CONTENTS

**1. GENERAL** ····· 6

**2. DISASSEMBY** ····· 7

**3. TEST MODE** ····· 14

**4. MECHANICAL ADJUSTMENTS** ····· 17

**5. ELECTRICAL ADJUSTMENTS** ····· 18

**6. DIAGRAMS**

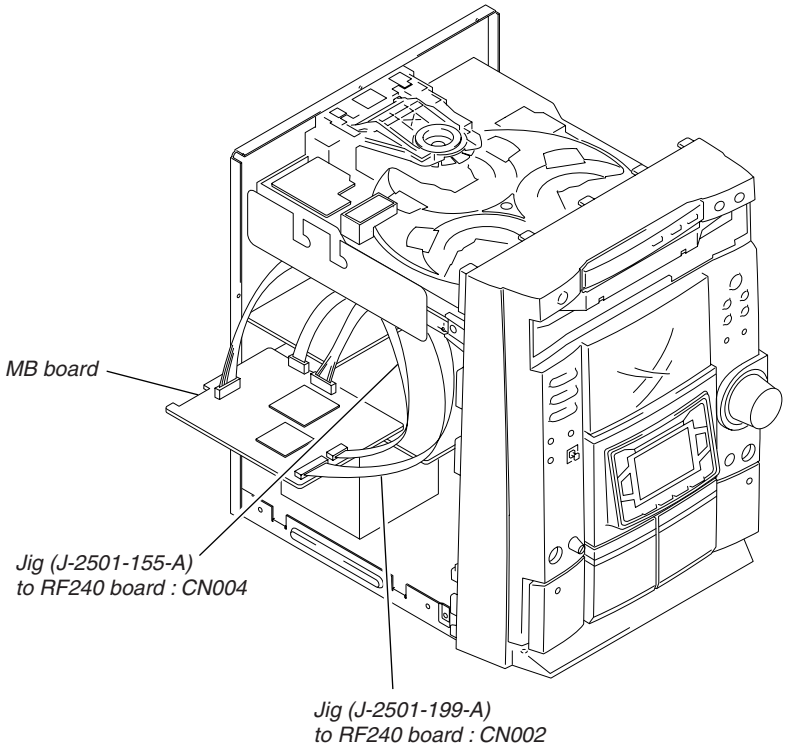
6-1. Circuit Board Location ····· 22
6-2. Block Diagrams ····· 23
6-3. Printed Wiring Board RF-240 Section ····· 26
6-4. Schematic Diagram RF-240 Section ····· 27
6-5. Printed Wiring Board MB Section ····· 28
6-6. Schematic Diagram MB Section (1/5) ····· 30
6-7. Schematic Diagram MB Section (2/5) ····· 31
6-8. Schematic Diagram MB Section (3/5) ····· 32
6-9. Schematic Diagram MB Section (4/5) ····· 33
6-10.Schematic Diagram MB Section (5/5) ····· 34
6-11. Schematic Diagram Driver Section ····· 35
6-12. Printed Wiring Board Driver Section ····· 35
6-13.Printed Wiring Board Main Section ····· 36
6-14.Schematic Diagram Main Section (1/3) ····· 37
6-15.Schematic Diagram Main Section (2/3) ····· 38
6-16.Schematic Diagram Main Section (3/3) ····· 39
6-17.Printed Wiring Board DSP Section ····· 40
6-18. Schematic Diagram DSP Section (1/2) ····· 41
6-19. Schematic Diagram DSP Section (2/2) ····· 42
6-20. Printed Wiring Board OPT/VIDEO Section ····· 43
6-21. Schematic Diagram OPT/VIDEO Section ····· 43
6-22. Printed Wiring Board Front Amp Section ····· 44
6-23. Schematic Diagram Front Amp Section ····· 45
6-24. Schematic Diagram Surround Amp Section ····· 46
6-25. Printed Wiring Board Surround Amp Section ····· 47
6-26. Printed Wiring Board Panel Section ····· 48
6-27. Schematic Diagram Panel Section (1/2) ····· 49
6-28. Schematic Diagram Panel Section (2/2) ····· 50
6-29. Printed Wiring Board Leaf SW Section ····· 51
6-30. Schematic Diagram Leaf SW Section ····· 51
6-31. Printed Wiring Board Trans Section ····· 52
6-32. Schematic Diagram Trans Section ····· 53
6-33. IC Pin Function Description ····· 54
6-34. IC Block Diagrams ····· 61

**7. EXPLODED VIEWS**

7-1. Main Section ····· 65
7-2. Front Panel Section ····· 66
7-3. Chassis Section ····· 67
7-4. Tape Mechanism Deck Section-1 (TCM-230MWR41) 68
7-5. Tape Mechanism Deck Section-2 (TCM-230AWR41) 69
7-6. DVD Mechanism Deck Section (CDM58D-DVBU9) · 70

**8. ELECTRICAL PARTS LIST** ····· 71

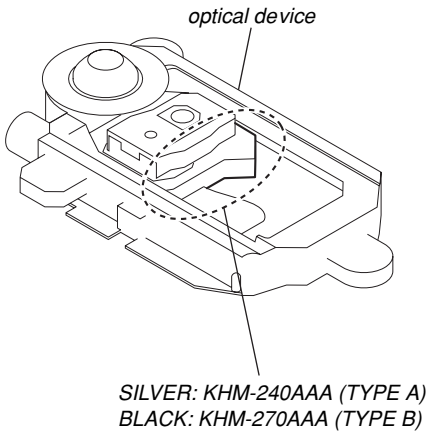
### SERVICE POSITION




### CHANGE OF OPTICAL PICK-UP

Optical Pick-up has been replaced from KHM-240AAA (TYPE A) to KHM-270AAA (TYPE B) from the middle of production.
In parallel with that, certain parts of MB board have been changed.

### TYPE A/B DISCRIMINATION




### PARTS LIST OF EACH MODEL

**MB BOARD**

| REF | TYPE A | | | | TYPE B | | | |
|---|---|---|---|---|---|---|---|---|
| | KHM-240AAA | | | | KHM-270AAA | | | |
| R076 | 1-216-837-11 METAL CHIP | 22K | 5% | 1/10W | No Mount | | | |
| R077 | 1-216-815-11 METAL CHIP | 330 | 5% | 1/10W | 1-216-833-11 METAL CHIP | 10K | 5% | 1/10W |
| R079 | 1-216-801-11 METAL CHIP | 22 | 5% | 1/10W | 1-216-845-11 METAL CHIP | 100K | 5% | 1/10W |

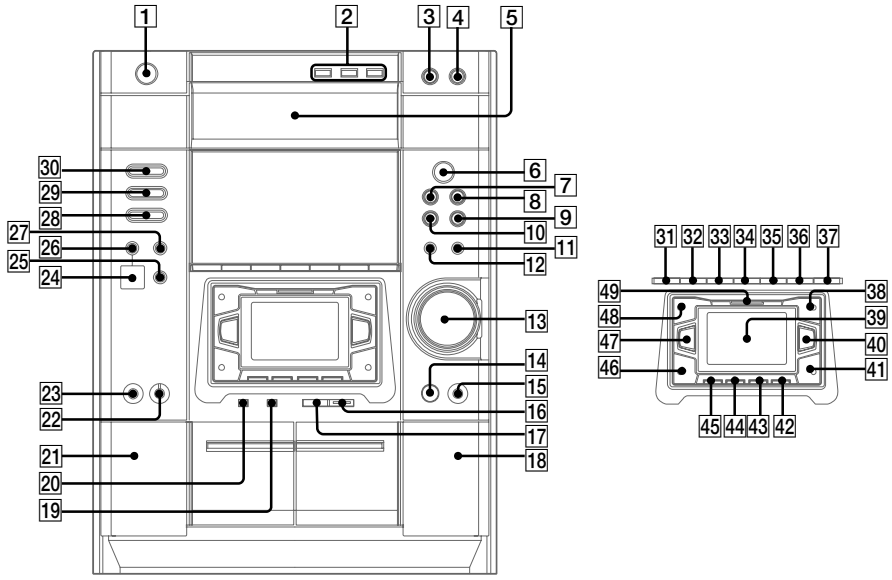
# SECTION 1
# GENERAL

This section is extracted from instruction manual.

## Parts Identification

The items are arranged in alphabetical order.

## Main unit




2CH/MULTI 42 (24, 46)
CD SYNC HI-DUB 17 (43, 44)
CLOCK/TIMER SET 33 (15, 45, 51)
DECK A ⏏ 21 (42)
DECK B ⏏ 18 (42)
digipad 39 (9, 24, 40, 47)
DIGITAL 26 (52)
DIGITAL IN (OPTICAL) jack 24 (52)
DIRECTION 35 (42–44, 50)
DISC 1–3 2 (23, 24)
DISC SKIP EX-CHANGE 3 (23, 24)
Disc tray 5 (23)
DISPLAY 31 (16, 29, 30)
DOLBY NR 36 (42–44)
DSP EDIT 47 (47)
DVD 30 (12, 25, 26, 34, 43, 44)
DVD DISPLAY 35 (17, 28, 30)
DVD MENU 19 (25)
EFFECT 43 (47)
ENTER 40 (14, 15, 25–27, 31, 32, 34–41, 44, 45, 47, 51)
FM MODE 36 (41)
GAME 25 (52)
GAME MODE 46 (47)
GROOVE 44 (46)
IR receptor 14
KARAOKE PON (Except for North American and European models) 32 (49)
MD (VIDEO) 27 (52)
MIC jack (Except for North American and European models) 23 (49)
MIC LEVEL control (Except for North American and European models) 22 (49)
MOVIE MODE 38 (47)
MULTI CHANNEL DECODING indicator 49 (46)
MUSIC MODE 48 (47)
P FILE 45 (48)
PHONES jack 15
PLAY MODE 37 (23, 26, 27, 44)
PTY (European model only) 35 (41)
REC PAUSE/START 16 (43, 44, 50)
REPEAT 36 (28, 29)
SPECTRUM (North American and European models only) 32 (49)
TAPE A/B 28 (42, 43)
TIMER SELECT 34 (45, 51)
TITLE 20 (25)
TOOL MODE 41 (47)
TUNER/BAND 29 (40)
TUNER MEMORY 37 (40)
VOLUME control 13

**BUTTON DESCRIPTIONS**

I/⏻ (power) 1
⏏ OPEN/CLOSE (disc tray) 4
◄► (play) 6
II (pause) 7
■ (stop) 8
I◄◄ (go back) 10
►►I (go forward) 9
◄◄/– (rewind) 12
►►/+ (fast forward) 11

## Setting the time

1 **Turn on the system.**

2 **Press CLOCK/TIMER SET.**
When you set the time for the first time, proceed to step 5.

3 **Press I◄◄ or ►►I repeatedly to select "CLOCK SET".**

4 **Press ENTER.**

5 **Press I◄◄ or ►►I repeatedly to set the hour.**

6 **Press ENTER.**

7 **Press I◄◄ or ►►I repeatedly to set the minutes.**

8 **Press ENTER.**

Tip
If you have made a mistake or want to change the time, start over from step 2.

Note
The clock settings are canceled when you disconnect the power cord or if a power failure occurs.

# SECTION 2
# DISASSEMBLY

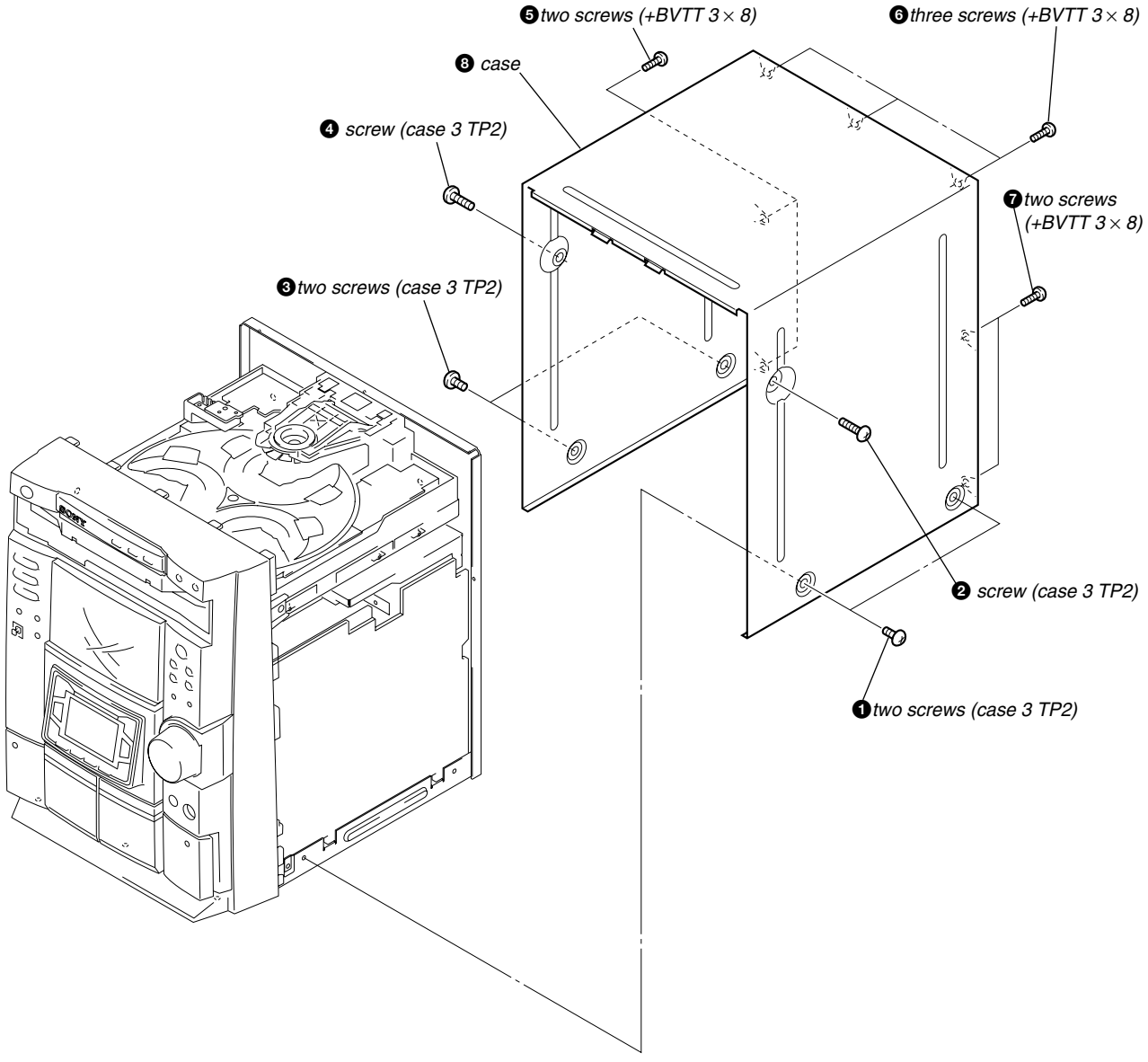
• The equipment can be removed using the following procedure.

Set → Case (Top) → Loading Panel → Front Panel Section

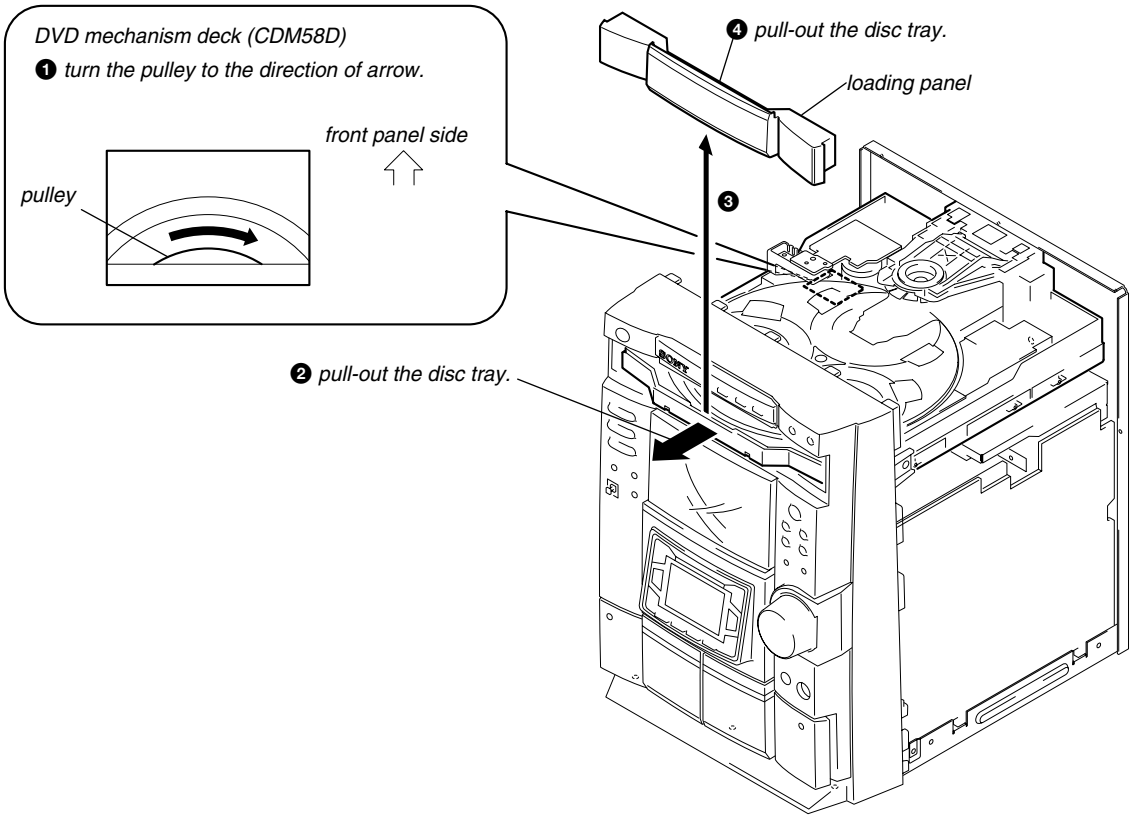
- → Tape Mechanism Deck (TCM-230AWR41/MWR41) → LEAF SW board, Head (A) board, Head (B) board
- → CD Panel board, Panel board, OPT IN Board → Escutcheon pad (With touch pad)
- → Chassis section → SUB Trans board, Back panel, Fan
  - → Tnans board, Main board → Front AMP board, Surround AMP board
- → DVD mechanism deck (CDM58D) → DSP board, MB board, VIDEO board → RF-240 board, optical pick-up (KHM-240AAA)
  - → Driver board, Motor board, Diode board, Sensor board, Tray, Sensor board

**Note :** Follow the disassembly procedure in the numerical order given.

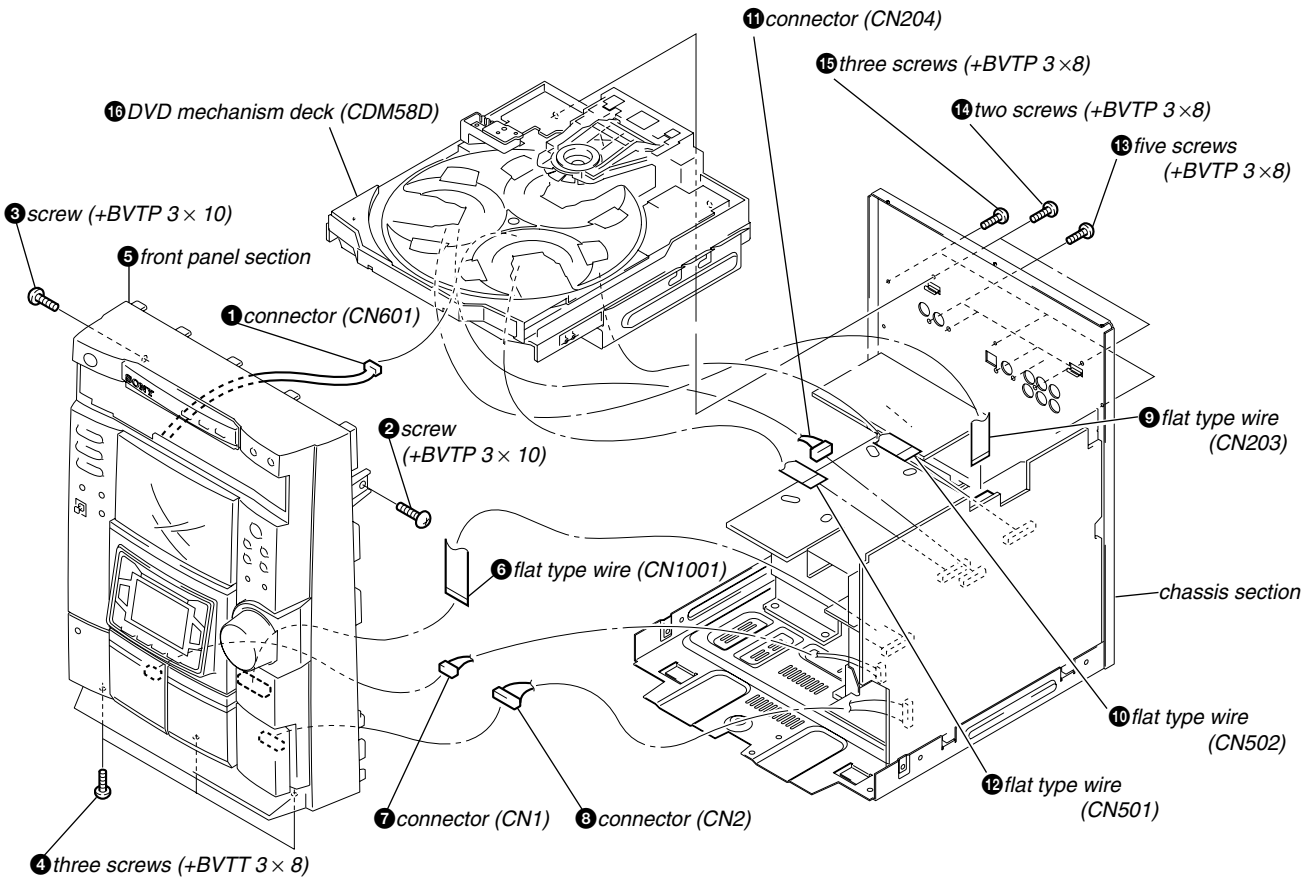
### 2-1. CASE (TOP)


❺two screws (+BVTT 3× 8)
❻three screws (+BVTT 3× 8)
❽ case
❹ screw (case 3 TP2)
❼two screws (+BVTT 3× 8)
❸two screws (case 3 TP2)
❷ screw (case 3 TP2)
❶two screws (case 3 TP2)

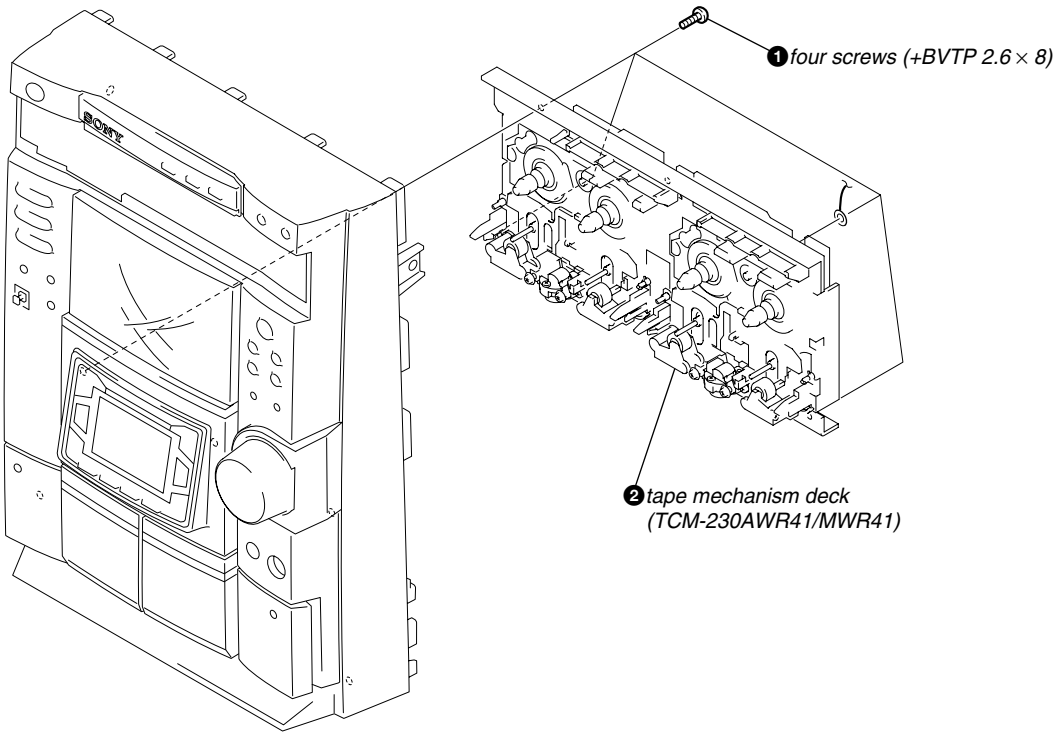
## 2-2. LOADING PANEL



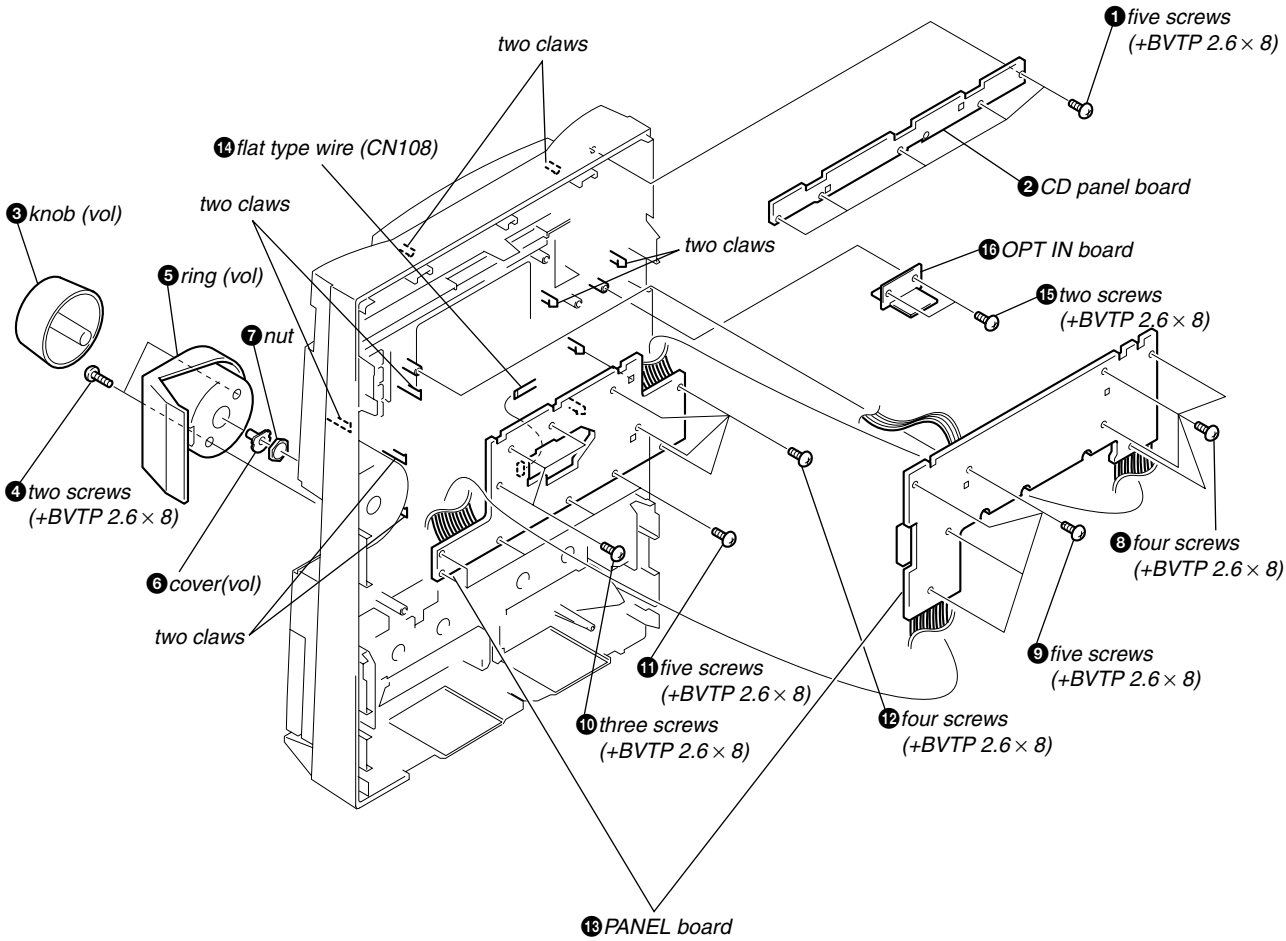

## 2-3. FRONT PANEL SECTION, DVD MECHANISM DECK (CDM58D)



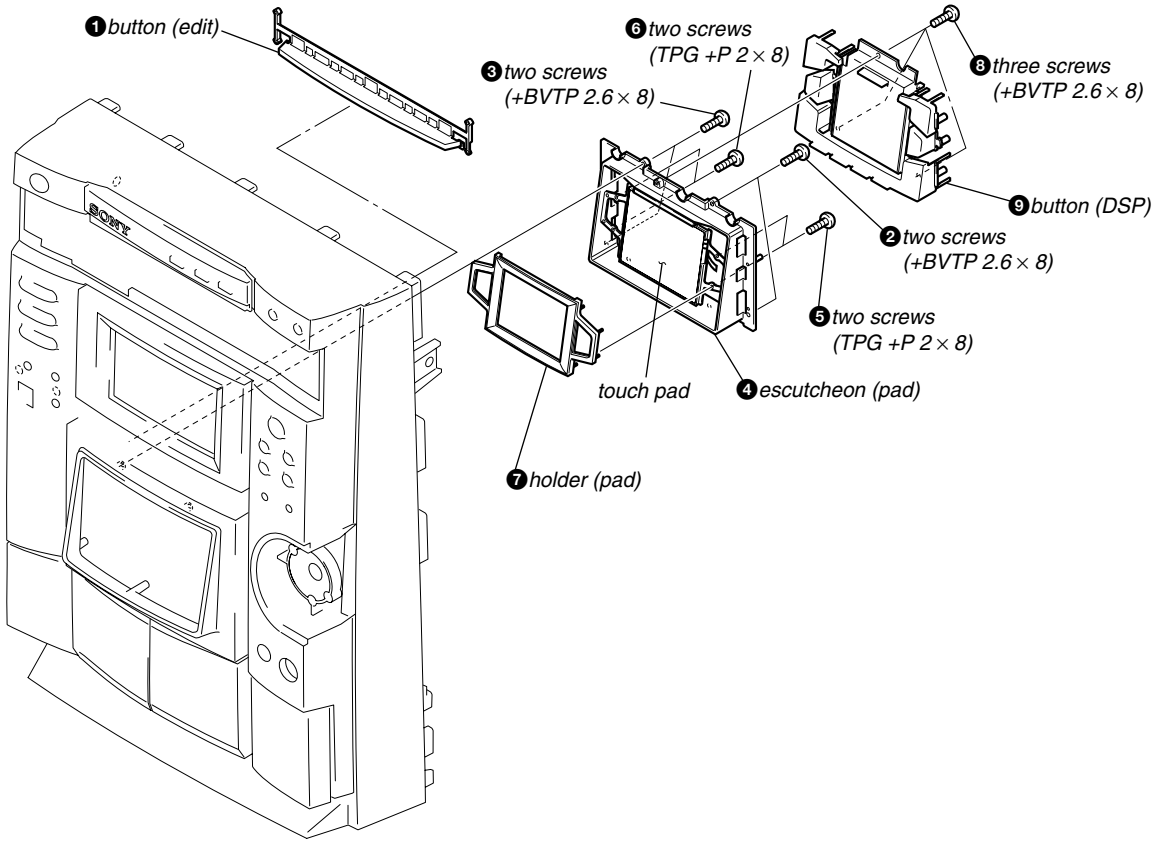
## 2-4. TAPE MECHANISM DECK (TCM-230AWR41/MWR41)



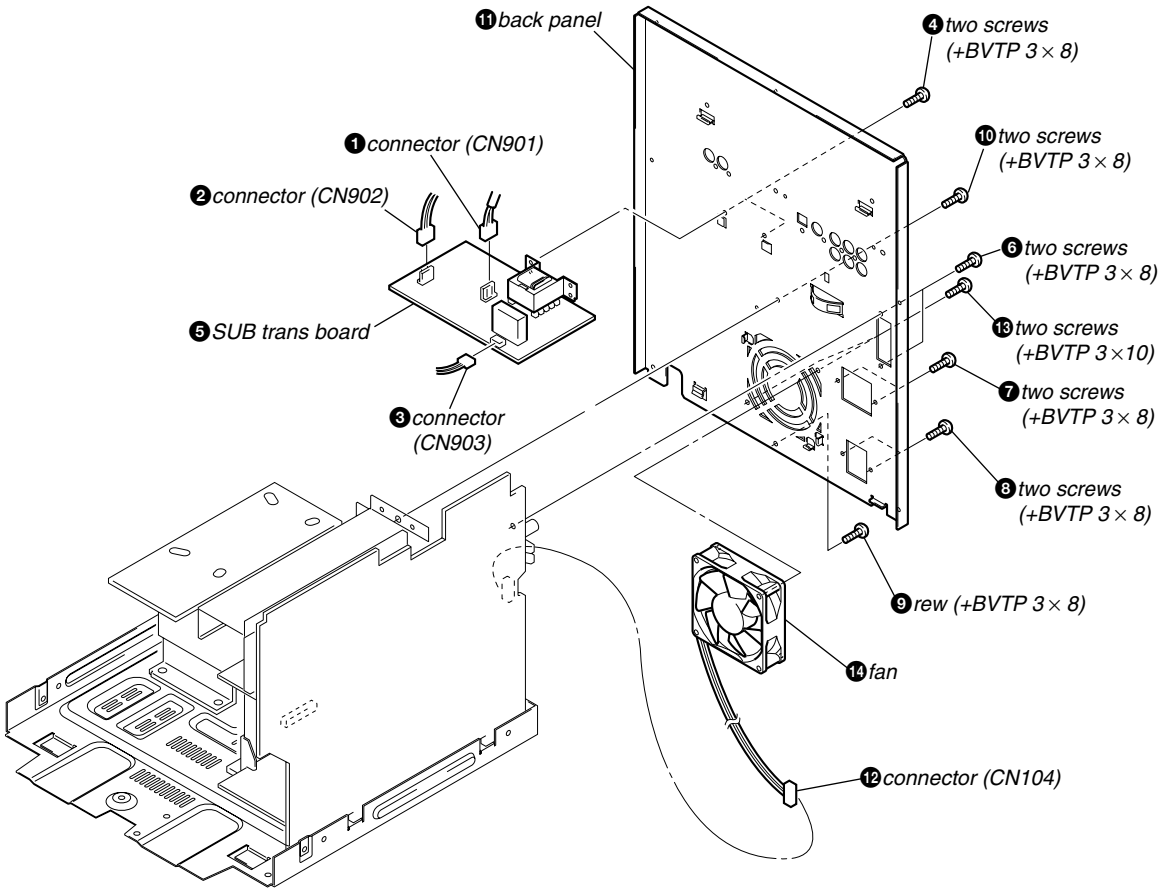

## 2-5. CD PANEL BOARD, PANEL BOARD, OPT IN BOARD



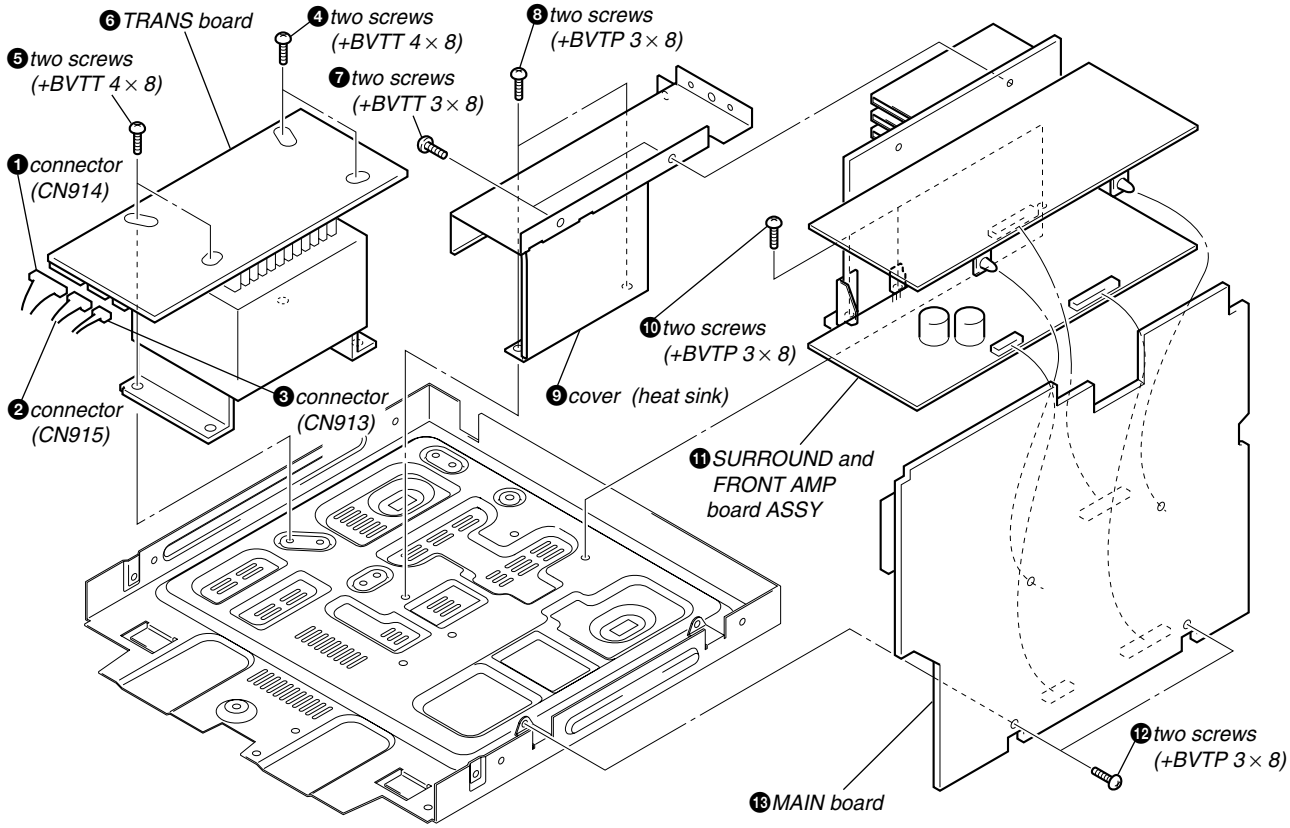
## 2-6. ESCUTCHEON PAD (WITH TOUCH PAD)



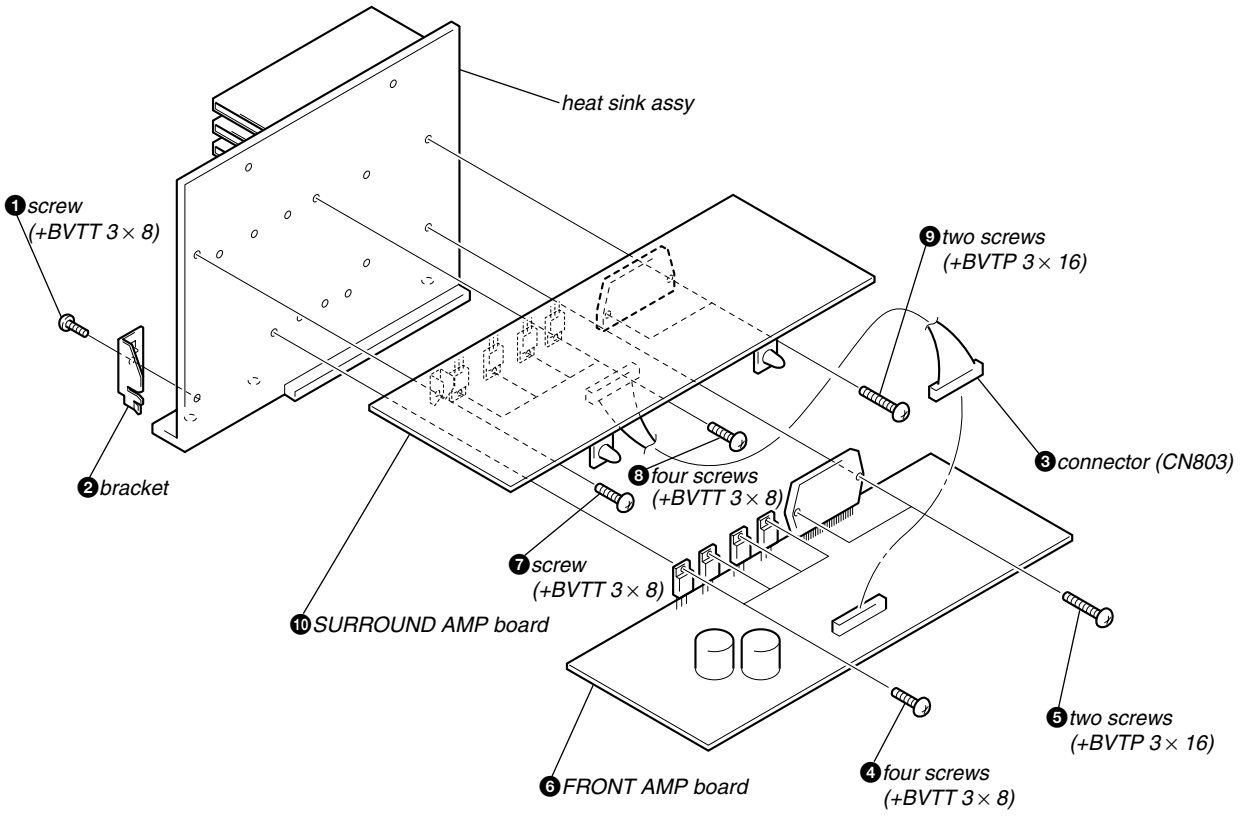

## 2-7. SUB TRANS BOARD, BACK PANEL, FAN



## 2-8. TRANS BOARD, MAIN BOARD

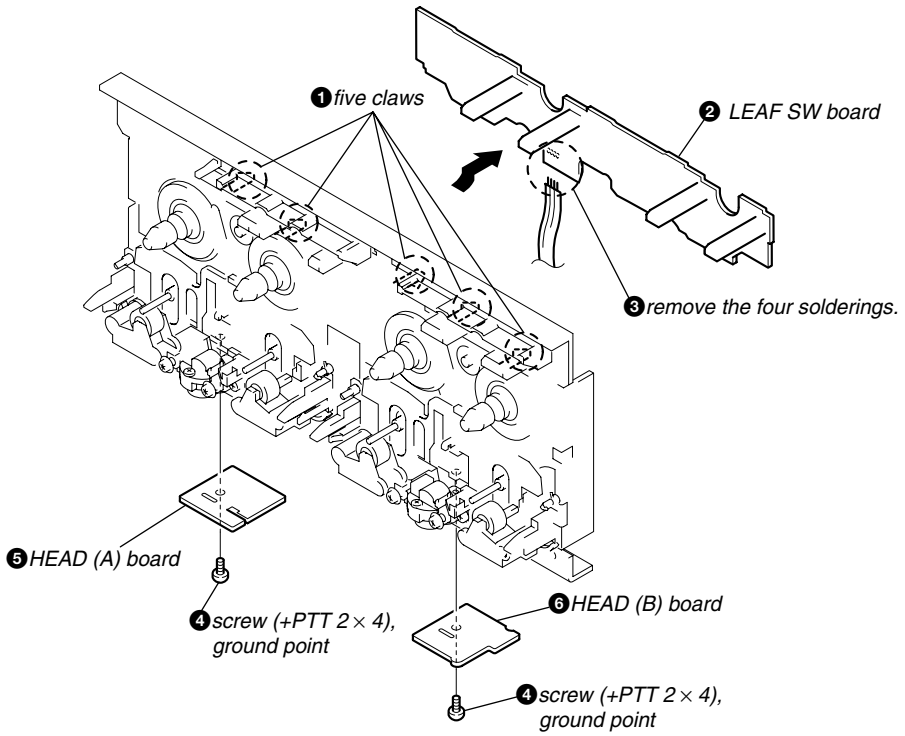

6 TRANS board
4 two screws (+BVTT 4× 8)
8 two screws (+BVTP 3× 8)
5 two screws (+BVTT 4× 8)
7 two screws (+BVTT 3× 8)
1 connector (CN914)
10 two screws (+BVTP 3× 8)
2 connector (CN915)
3 connector (CN913)
9 cover (heat sink)
11 SURROUND and FRONT AMP board ASSY
12 two screws (+BVTP 3× 8)
13 MAIN board

## 2-9. FRONT AMP BOARD, SURROUND AMP BOARD

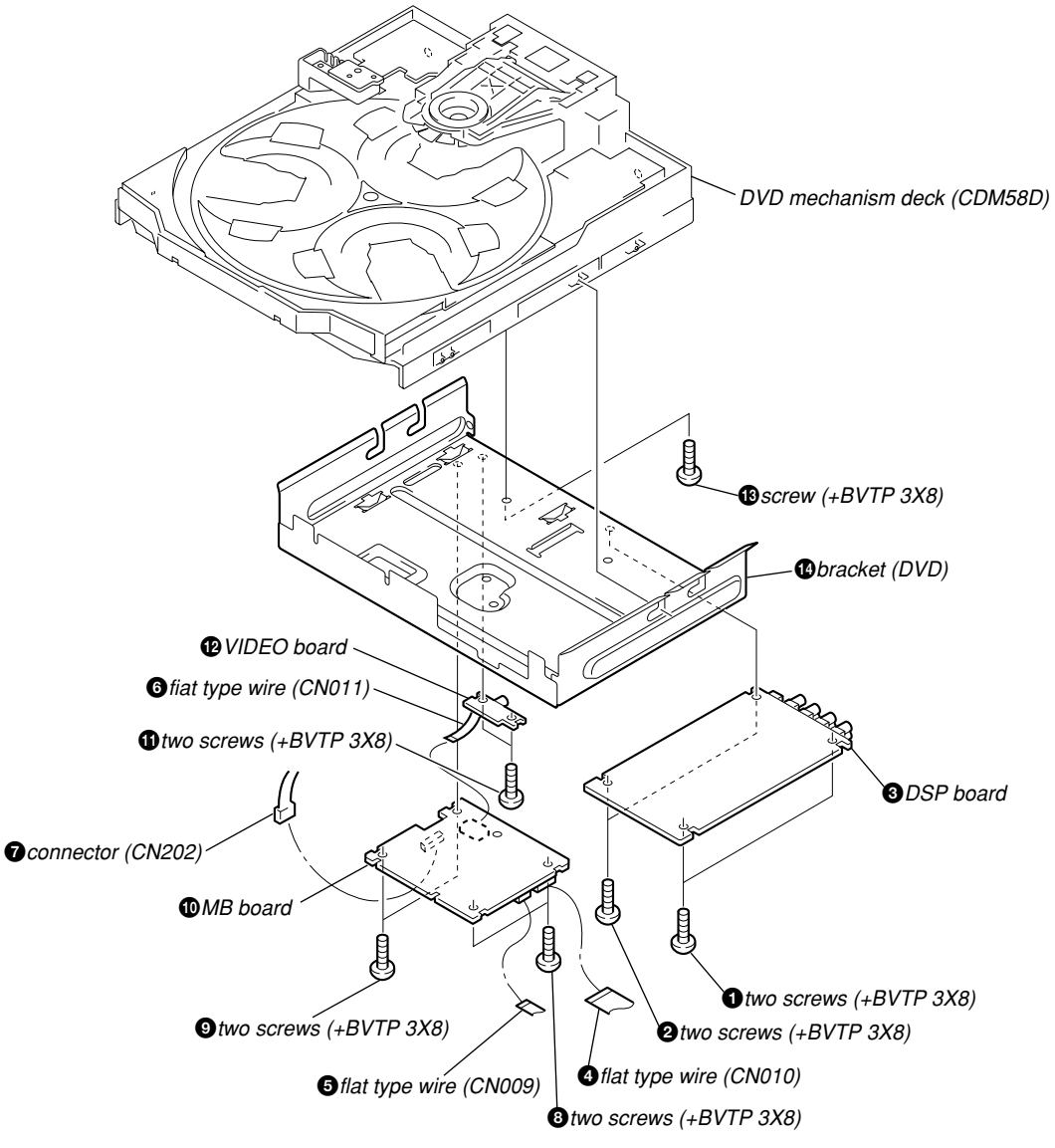

heat sink assy
1 screw (+BVTT 3× 8)
9 two screws (+BVTP 3× 16)
2 bracket
3 connector (CN803)
8 four screws (+BVTT 3× 8)
7 screw (+BVTT 3× 8)
10 SURROUND AMP board
5 two screws (+BVTP 3× 16)
6 FRONT AMP board
4 four screws (+BVTT 3× 8)

### 2-10. LEAF SW BOARD, HEAD (A) BOARD, HEAD (B) BOARD (TCM-230AWR41/MWR41)

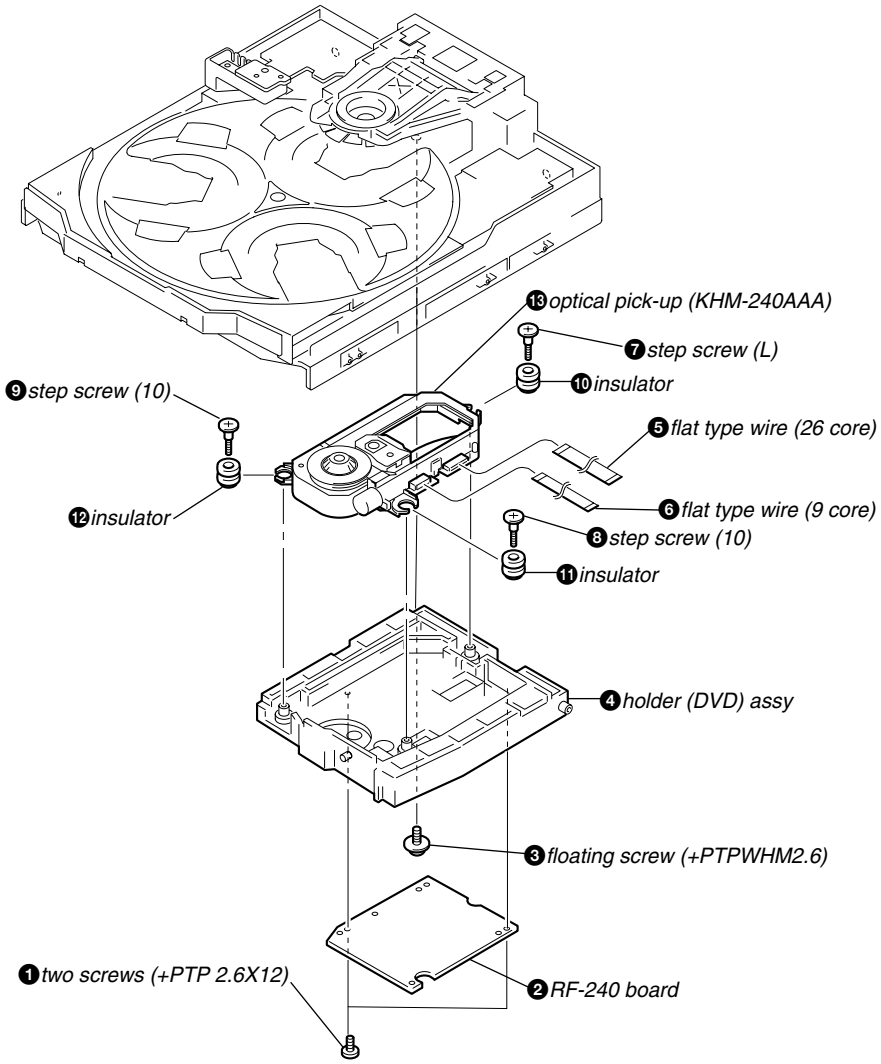
**Note:** This illustration is for TCM-230MWR, but in case of TCM-230AWR, you can remove them in the same way.


❶ five claws
❷ LEAF SW board
❸ remove the four solderings.
❺ HEAD (A) board
❹ screw (+PTT 2 × 4), ground point
❻ HEAD (B) board
❹ screw (+PTT 2 × 4), ground point

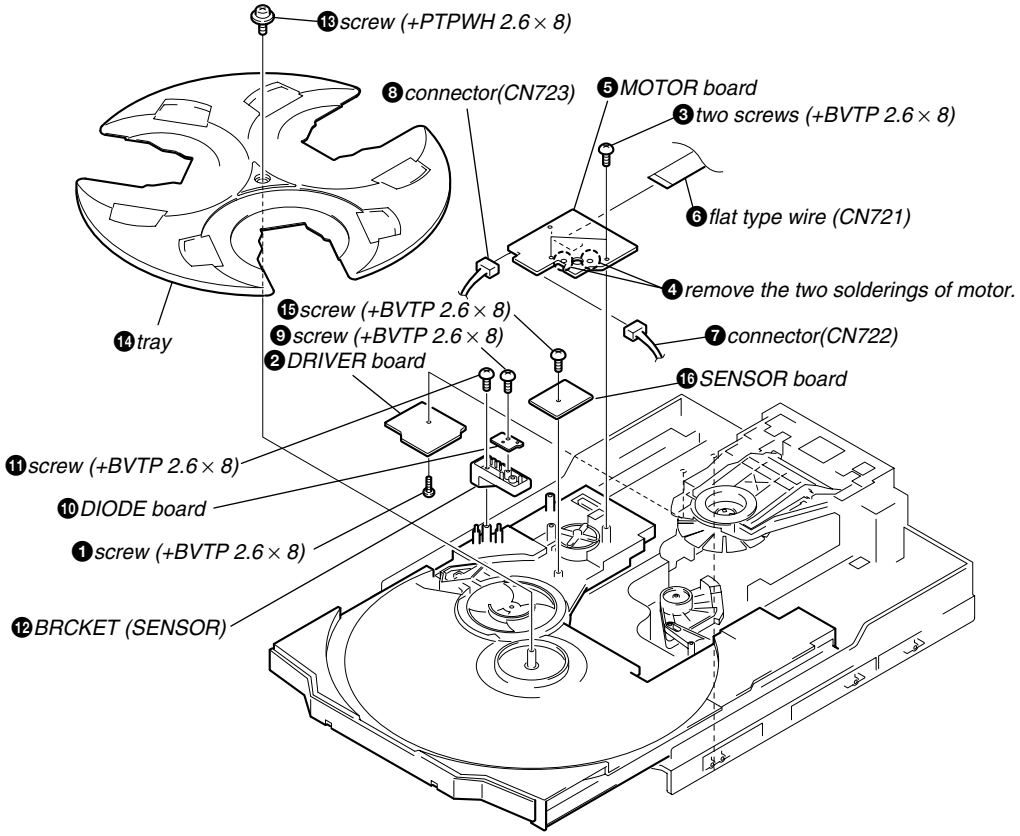
### 2-11. BASE UNIT, DSP BOARD, MB BOARD, VIDEO BOARD


DVD mechanism deck (CDM58D)
⓭ screw (+BVTP 3X8)
⓮ bracket (DVD)
⓬ VIDEO board
❻ flat type wire (CN011)
⓫ two screws (+BVTP 3X8)
❸ DSP board
❼ connector (CN202)
⓾ MB board
❶ two screws (+BVTP 3X8)
❾ two screws (+BVTP 3X8)
❷ two screws (+BVTP 3X8)
❺ flat type wire (CN009)
❹ flat type wire (CN010)
❽ two screws (+BVTP 3X8)

## 2-12. RF-240 BOARD, OPTICAL PICK-UP (KHM-240AAA)




## 2-13. DRIVER BOARD, MOTOR BOARD, DIODE BOARD, TRAY, SENSOR BOARD


⓭ screw (+PTPWH 2.6 × 8)
❽ connector(CN723)
❺ MOTOR board
❸ two screws (+BVTP 2.6 × 8)
❻ flat type wire (CN721)
❹ remove the two solderings of motor.
⓯ screw (+BVTP 2.6 × 8)
❾ screw (+BVTP 2.6 × 8)
❼ connector(CN722)
⓮ tray
❷ DRIVER board
⓰ SENSOR board
⓫ screw (+BVTP 2.6 × 8)
❿ DIODE board
❶ screw (+BVTP 2.6 × 8)
⓬ BRCKET (SENSOR)

# SECTION 3
# TEST MODE

**[Cold Reset]**

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

**Procedure:**

1. Press three buttons [■] , [DISPLAY] , and [DISC 1] simultaneously.
2. The fluorescent indicator tube becomes blank instantaneously, and the set is reset.

**[Tuner Step Change]** (Except for European and Middle Eastern models)

- A step of AM channels can be changed over between 9 kHz and 10 kHz.

**Procedure:**

1. Press [I/⏻] button to turn the set ON.
2. Select the function "TUNER", and press [TUNER/BAND] button to select the BAND "AM".
3. Press [I/⏻] button to turn the set OFF.
4. Press [ENTER] and [I/⏻] buttons simultaneously, and the display of fluorescent indicator tube changes to "AM 9 k STEP" or "AM 10 k STEP", and thus the channel step is changed over.

**[MD/VIDEO Function Change]**

- Change of function MD or VIDEO ( also the input level changes).

**Procedure:**

1. Press [I/⏻] button to turn the set ON.
2. Press [MD (VIDEO)] and [I/⏻] buttons simultaneously, and the display of fluorescent indicator tube changes to "MD" or "VIDEO", and thus the channel step is changed over.
3. Press [I/⏻] button to turn the set OFF.

**[GC Test Mode]**

- This mode is used to check the software version, FL tube, LED, keyboard and VACS.

**Procedure:**

1. Press three buttons [■] , [DISPLAY] , and [DISC 2] simultaneously.
2. LEDs and fluorescent indicator tube are all turned on.
3. When you want to enter the software version display mode, press [DISC 1].The model number and destination are displayed.
4. Each time [DISC 1] is pressed, the display changes stating from MC version, GC version, DVD version, CDDM, CDMA, CDMB, BDA, BDB version, ST version, TA version, TM version, TC version, in this order, and returns to the model number and destination display.
5. When [DISC 3] is pressed while the version numbers are being displayed except model number and destination, year, month and day of the software creation appear. When [DISC 3] is pressed again, the display returns to the software version display. When [DISC 1] is pressed while year, month and day of the software creation are being displayed, the year, month and day of creation of the software versions are displayed in the same order of version display.
6. Press [DISC 2] button, and the key check mode is activated.
7. In the key check mode, the fluorescent indicator tube displays "KOJOVO". Each time a button is pressed, "KEY" value increases.
   However, once a button is pressed, _it is no longer taken into account.
   "VOL" value increases like 1, 2, 3...if rotating VOLUME knob in "+" direction, or it decreases like 0, 9, 8...if rotating in "_"direction.
8. Also when [DISC 3] is pressed after lighting of all LEDs and FL tubes, value of VACS appears.
9. To exit from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

**[MC Test Mode]**

- This mode is used to check operations of the respective sections of Amplifier, Tuner, and Tape.

**Procedure:**

- To enter MC Test Mode

1. Press [I/⏻] button to turn on the set.
2. Press the three buttons of [■] , [DISPLAY] and [DISC 3] simultaneously.
3. Cursor segment flash on the FL display tube. The input FUNCTION is changed to GAME.

* Check of Amplifier

Initial settings: Input ➡ GAME
EQ ➡ FLAT
Mode ➡ MUSIC
VA CS ➡ OFF

Output channel switching:

MUSIC key: L ➡ L R ➡ R through
MOVIE key: L ➡ SL R ➡ SR through
GAME key:L ➡ L, SL, C R ➡ R, SR, SW through
TOOL MODE key: L ➡ C R ➡ SW through

1. When [VOLUME] control knob is turned clockwise even slightly, the sound volume increases to is maximum and a message "VOLUME MAX" appears for two seconds, then the display returns to the original display.
2. When [VOLUME] control knob is tuned counter-clockwise even slightly, the sound volume decreases to its minimum and a message "VOLUME MIN" appears for two seconds, then the display returns to the original display.

* Tuner function

1. In the test mode, the default-preset channel is called even when the TUNER is selected and an attempt is made to call the preset channel that has been stored in memory. (It means that the memory is cleared.)
2. The minimum, center and maximum frequency of each band is set then.

* Tape recording test

1. To enter the MC Test Mode.
2. Load tapes in both tape decks A and B.
3. Press the REC button to start recording.
4. Pressing [▶▶] ,[◀◀] buttons during recording returns the tape to the recording start position and stops it at this position.
5. Pressing the "High Speed Dubbing" key while playing back the tape of deck B switches the playback speed between "Normal Speed" and "High Speed".

**Note:**

When the playback direction of the tape is set to other than "ONY WAY", the restriction on the number of times playback which can be repeated will be cleared.

* AMS Test Mode

1. Set TAPE function
2. Select the desired loop by pressing [PLAY MODE] button. Insert a test tape AMS-110A or AMS-120 to Deck A.
3. Press [SPECTRUM] or [KARAOKE PON] button to enter the AMS test mode.
4. After a tape is rewound first, the FF AMS is checked, and the mechanism is shut off after detecting the AMS signal the AMS signal twice.
5. Then the REW AMS is checked and the mechanism is shut off after detecting the AMS signal twice.
6. When the check is complete, a message of either OK or NG appears.

* To return to normal mode again.

1. When you want to exit this mode, press [I/⏻] button.
2. The cold reset is enforced at the same time.

### [Aging Mode]

This mode can for operation check of tape deck section and DVD section.

- If an error occurred:

The aging operation stops and display then status.

- If no error occurs:

The aging operation continues repeatedly.

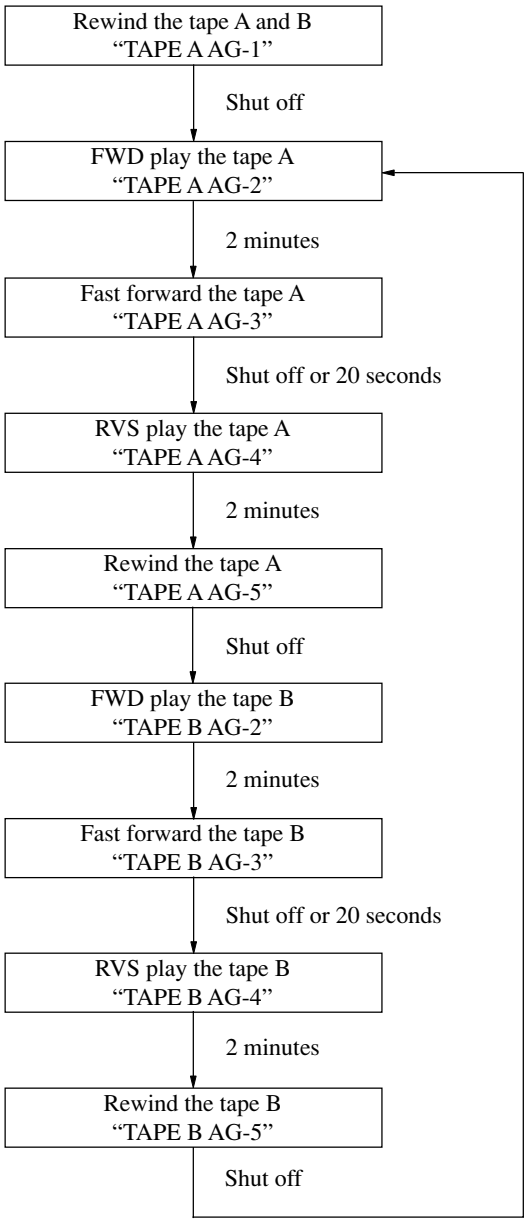
**Procedure:**

1. Press the DVD button to select the function "DVD".
2. Load the tapes into the decks A and B respectively.
3. Set a disk in "DISK1" tray.
4. Press the PLAY MODE button to set the "ALL DISCS" mode, and press the REPEAT button to "REPEAT" off.
5. Press three buttons of ■, ENTER, and DISC SKIP/EX-CHANGE simultaneously.
6. The aging mode is activated, if the indicator of DOLBY NR is blinking.
7. To exit from the aging mode, operate the cold reset.

### [Tape Deck Section]

- The sequence during the aging mode is following as below.
- If an error occurred, stop display that step.

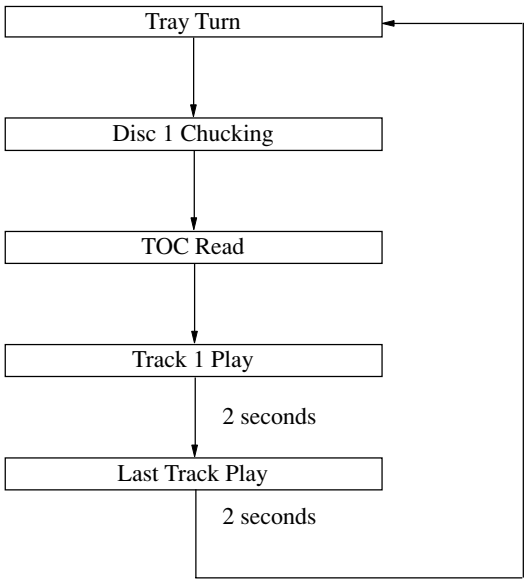
**Aging mode sequence (Tape deck section):**



**[DVD Section]**

- The sequence during the aging mode is following as below.

**Aging mode sequence (DVD section):**




## Error History Display

**1. BD Error History Display**

11 digits are displayed after the D character.

**Example of display : D00209010100**

1st digit : Indicates the error history number.
0 is the latest error

2nd to 3rd digits : Indicates details of the problem.
- 01 : Cannot focus
- 02 : GFS NG
- 03 : Start time over
- 04 : Focus deviates continuously
- 05 : Q code absent for some time

4th to 5th digits : Processing when problems occur
- 01 : Currently SHIP processing
- 02 : Currently POWER OFF processing
- 03 : Currently initializing
- 04 : Currently stopping
- 05 : Currently STOP operation processing
- 06 : Currently start processing
- 07 : Currently TOC reading
- 08 : Currently searching
- 09 : Currently playing
- 0A : Currently pausing
- 0B : Currently PLAY manual searching
- 0C : Currently PAUSE manual searching

6th to 7th digits : Operations currently performed for problems which have occurred

8th to 9th digits : Rotation speed of DISC when problems occur
- 01 : x1 speed
- 02 : x2 speed

10th to 11th digits : Fixed at 00

**2. CDM Error History <CDM58D Error History Display>**

11 digits are displayed after the M character.

**Example of display : M0FF400220000**

1st digit : Indicates the error history number.
0 is the latest error

2nd to 3rd digits : Indicates the details of the problem.
- 01 : Initialization table is currently rotating 1
- 02 : Initialization table is currently rotating 2
- 03 : Initialization table is currently rotating 3
- 04 : Currently DISC SKIP in OPEN mode
- 05 : CLOSE table is currently rotating
- 06 : Chucking table is currently rotating
- 07 : Currently performing SHIP operations
- 08 : Currently performing release operations
- 09 : Currently performing POWER OFF operations

4th to 5th digits : Processing when problems occur
- 01 : Currently performing SHIP operations
- 02 : Currently performing POWER OFF operations
- 03 : Currently initializing
- 04 : Currently performing release operations
- 05 : Currently in chuck stop state
- 06 : Currently performing CLOSE operations
- 07 : Currently performing exchange CLOSE operations
- 08 : Currently performing OPEN operations
- 09 : Currently performing OPEN POP UP operations
- 0A: Currently performing exchange OPEN operations

6 to 7th digits : Operations currently performed for problems which have occurred

8th to 9th digits : Targets of processing when problems occur
Same as 4th to 5th digits

10th to 11th digits : Fixed at 00

**[DVD and CD Ship Mode (No Memory Clear)]**

- This mode moves the position to the position durable to vibration Use this mode when returning the set to the customer after repair.

**Procedure:**

1. Press [I/⏻] button to turn the set ON.
2. Press three [DVD] button and [I/⏻] button simultaneously.
3. After the "STANBY" display blinks six times, a message "LOCK" is displayed on the fluorescent indicator rube, and the DVD ship mode is set.

**[DVD and CD Ship Mode (Memory Clear)]**

- This mode moves the pickup to the position durable to vibration. Use this mode when returning the set to the customer after repair.

**Procedure:**

1. Press [I/⏻] button to turn the set ON.
2. Press three buttons [ENTER], [DISC 1], and [DVD] button simultaneously.
3. After the "STANDBY" display blinks six times, a message "LOCK" is displayed on the fluorescent indicator tube, and the DVD ship mode is set.

# SECTION 4
# MECHANICAL ADJUSTMENTS

### [VACS ON/OFF MODE]

• This mode is used to switch ON and OFF the VACS (Variable Attenuation Control System).

**Procedure:**

Press the three buttons [■] , [ENTER] and [SPECTRUM] or [KARAOK PON] simultaneously.

### [REPEAT 5 LIMIT OFF MODE]

• This mode is used to enable infinite repetitions.
Normally, the number of repetitions allowed is 5.

**Procedure:**

1. Press [I/⏻] button to turn ON the power supply.
2. Set the function "DVD".
3. Press three burtons [ENTER], [DISC 3], and [■] is simultaneously.
4. Infinite repetitions is enabled.
5. This state is maintained ( memorized ) until COLD RESET is executed.

### Precaution

1. Clean the following parts with a denatured alcohol-moistened swab:
   record/playback heads — pinch rollers
   erase head — rubber belts
   capstan — idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

### Torque Measurement

| Mode | Torque meter | Meter reading |
|---|---|---|
| FWD | CQ-102C | 3.06 N • m to 6.96 N • m<br>31 to 71 g • cm<br>(0.43 – 0.98 oz • inch) |
| FWD<br>back tension | CQ-102C | 0.19 N • m to 0.58 N • m<br>2 to 6 g • cm<br>(0.02 – 0.08 oz • inch) |
| REV | CQ-102RC | 3.06 N • m to 6.96 N • m<br>31 to 71 g • cm<br>(0.43 – 0.98 oz • inch) |
| REV<br>back tension | CQ-102RC | 0.19 N • m to 0.58 N • m<br>2 to 6 g • cm<br>(0.02 – 0.08 oz • inch) |
| FF/REW | CQ-201B | 6.96 N • m to 14.02 N • m<br>71 to 143 g • cm<br>(0.98 – 1.99 oz • inch) |
| FWD tension | CQ-403A | 9.80 N • m<br>100 g or more<br>(3.53 oz or more) |
| REV tension | CQ-403R | 9.80 N • m<br>100 g or more<br>(3.53 oz or more) |

# HCD-DP1000D
# SECTION 5
# ELECTRICAL ADJUSTMENTS

**DECK SECTION** | 0 dB=0.775 V

1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjust.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.

• Test Tape

| Tape | Signal | Used for |
|---|---|---|
| P-4-A100 | 10 kHz, –10 dB | Azimuth Adjustment |
| WS-48B | 3 kHz, 0 dB | Tape Speed Adjustment |
| P-4-L300 | 315 Hz, 0 dB | Level Adjustment |

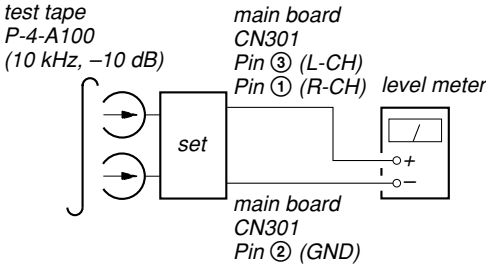
### Record/Playback Head Azimuth Adjustment

**DECK A** **DECK B**

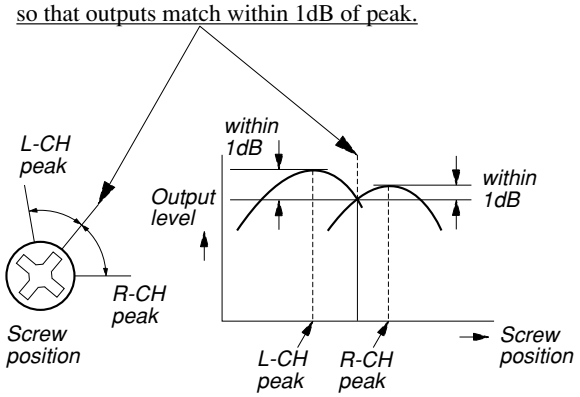
**Note:** Perform this adjustments for both decks

**Procedure:**

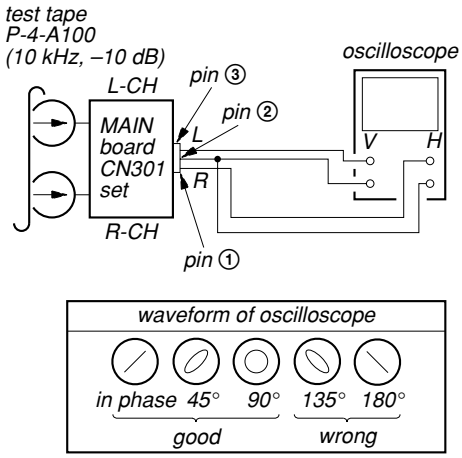
1. Mode: Playback




2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1dB of peak.

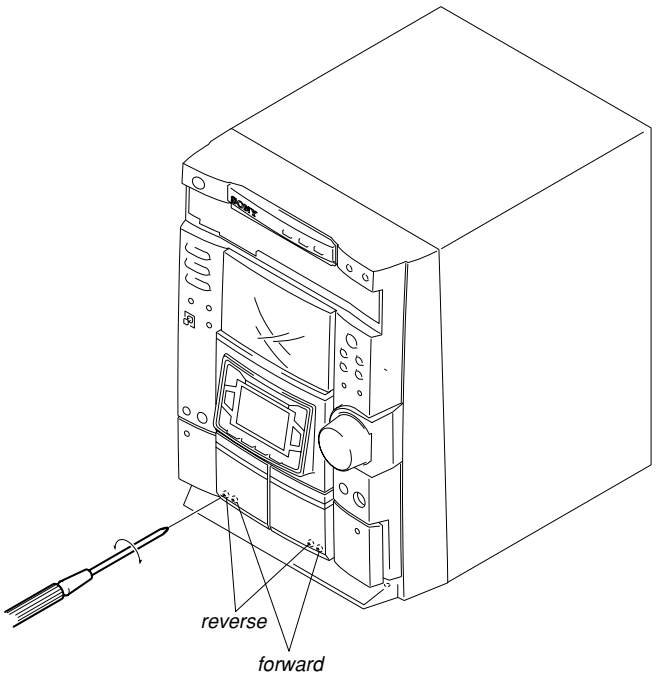



3. Mode: Playback




4. After the adjustments, apply suitable locking compound to the pats adjusted.

**Adjustment Location:** Playback Head (Deck A).
Record/Playback/Erase Head (Deck B).



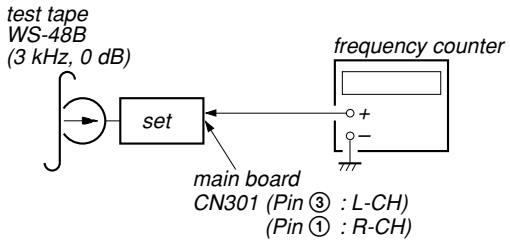
### Tape Speed Adjustment DECK B

**Note:** Start the Tape Speed adjustment as below after setting to the test mode.
In the test mode, the tape speed is high during pressing the CD SYNC HI-DUB button.

**Procedure:**

1. Turn the power switch on.
2. Press the ■ button, DISPLAY button and DISC 3 button simultaneously.
   (Cursor segment flash on the FL display tube.)
   To exit from the test mode, press the I/⏻ button.

Mode: Playback



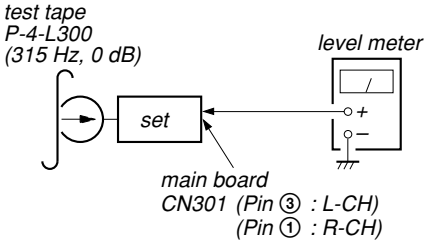

1. Insert the WS-48B into the deck B.
2. Press the ◀▶ button on the deck B.
3. Press the CD SYNC HI-DUB button in playback mode.
   Then at HIGH speed mode.
4. Adjust RV1001 on the LEAF SW board do that frequency counter reads 6,000 ± 180 Hz.
5. Press the CD SYNC HI-DUB button.
   Then back to NORMAL speed mode.
6. Adjust RV1002 on the LEAF SW board so that frequency counter reads 3,000 ± 90 Hz.

**Adjustment Location:** LEAF SW board

### Playback level Adjustment DECK A DECK B

**Procedure:**

Mode: Playback




Deck A is RV302 (L-CH), Deck B is RV303 (L-CH) so that adjustment within adjustment level as follows.

**Adjustment Level:**

CN301 PB level: 334 to 375 mV (–6.8 dB ± 0.5 dB) level difference between the channels: within ±0.5 dB

**Adjustment Location:** MAIN board

**Sample Volue of Wow and Flutter:** 0.3% or less W. RMS
(WS-48B)

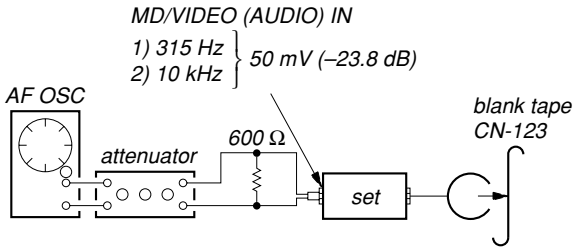
### REC Bias Adjustment DECK B

**Procedure:**

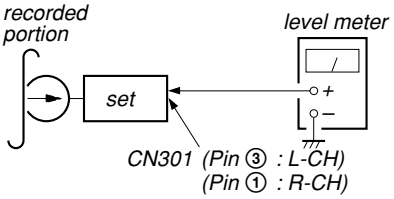
INTRODUCTION

When set to the test mode performed in Tape Speed Adjustment, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO.
(If do not operation of stopped from recording complete, and rotette of shuttle knob then rewind to recording start position.)

1. Press MD (VIDEO) button to select VIDEO. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B.
3. After press REC PAUSE/START button, press REC PAUSE/START button, then recording start.
4. Mode: Record




5. Mode: Playback




6. Confirm playback the signal recorded in step 3 become adjustable level as follows.
   If these levels do not adjustable level, adjustment the RV304 (L-CH) and RV354 (R-CH) on the AUDIO board to repeat steps 4 and 5.

**Adjustable level:** Playback output of 315 Hz to playback output of 10 kHz: 0±0.5 dB

**Adjustment Location:** MAIN board

### REC Level Adjustment DECK B

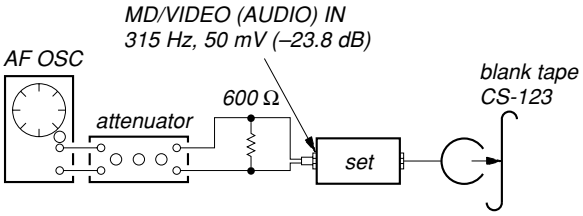
**Procedure:**

INTRODUCTION

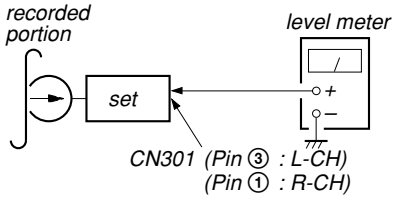
When set to the test mode performed in Tape Speed Adjustment, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO.
(If do not operation of stopped from recording complete, and rotate of shuttle knob then rewind to recording start position.)

1. Press MD (VIDEO) button to select VIDEO. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B.
3. After press REC PAUSE/START button, press REC PAUSE/START button, then recording start.

4. Mode: Record



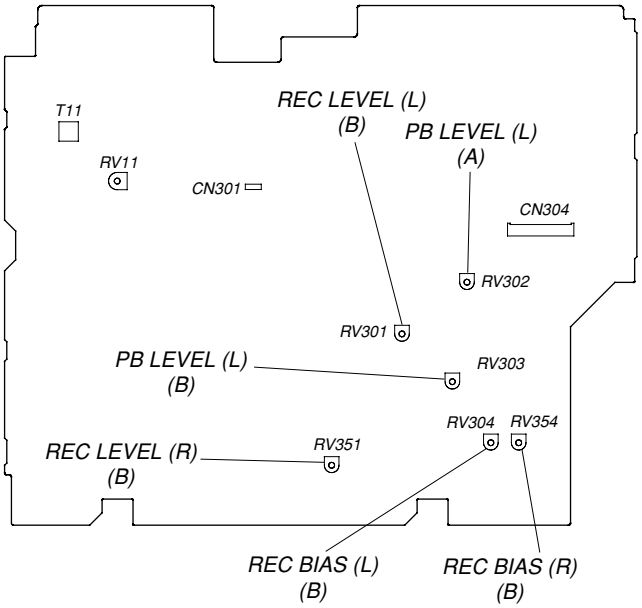

5. Mode: Playback



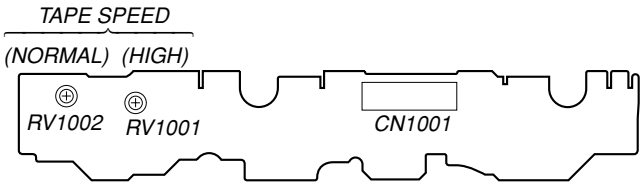

6. Confirm playback the signal recorded in step 3 become adjustable level as follows.
   If these levels do not adjustable level, adjustment the RV301 (L-CH) and RV351 (R-CH) on the MAIN board to repeat steps 4 and 5.

**Adjustable level:**
CN301 PB level: 33.4 to 37.5 mV (–27.3 to –26.3 dB)
**Adjustment Location:** MAIN board

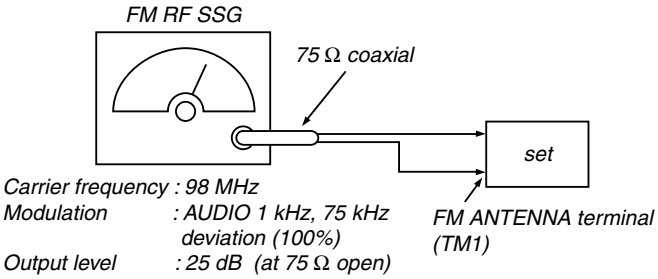
**[MAIN BOARD]** (Component Side)




**[LEAF SW BOARD]** (Component Side)



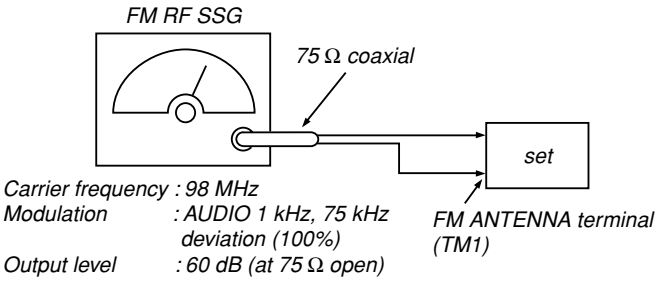

**FM Tuned Level Adjustment**


FM RF SSG
75 Ω coaxial
set
Carrier frequency : 98 MHz
Modulation : AUDIO 1 kHz, 75 kHz deviation (100%)
Output level : 25 dB (at 75 Ω open)
FM ANTENNA terminal
(TM1)

**Procedure:**
1. Supply a 25 dB 98 MHz signal from the ANTENNA terminal.
2. Tune the set to 98 MHz.
3. Adjust RV11 to the point (moment) when the TUNED indicator will change from going off to going on.

**Adjustment Location:** MAIN board

**Null Adjustment**

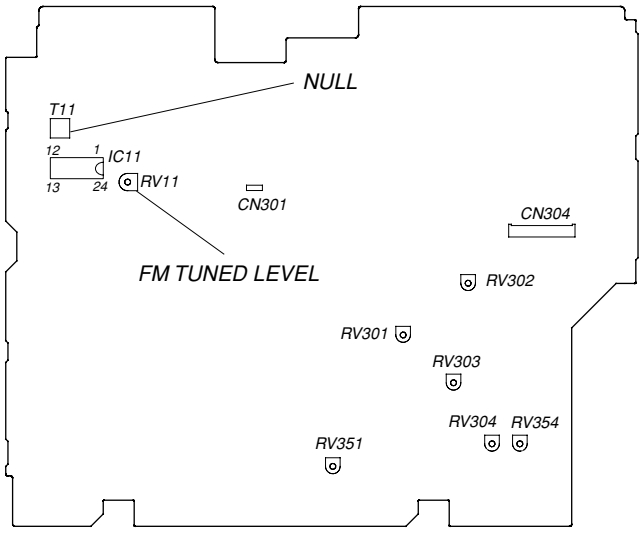

FM RF SSG
75 Ω coaxial
set
Carrier frequency : 98 MHz
Modulation : AUDIO 1 kHz, 75 kHz deviation (100%)
Output level : 60 dB (at 75 Ω open)
FM ANTENNA terminal
(TM1)

**Procedure:**
1. Supply a 60 dB 98 MHz signal from the ANTENNA terminal.
2. Tune the set to 98 MHz.
3. Measure voltage between pin 22 and pin 3 of IC 11. Adjust T11 ubtil the voltage becomes 0 V.

**Adjustment Location:** MAIN board

**Adjustment Location**

**[MAIN BOARD] Component side**



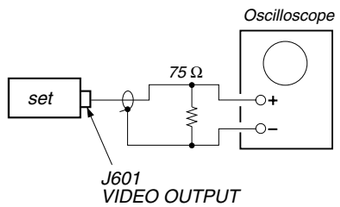
## DVD SECTION

**RE-ADJUSTMENT OF THE SERVO CIRCUIT**
**The re-adjustment of the servo circuit is necessary when the part which relates to the servo circuit is replaced.**
**Referring to "4-9. DRIVE AUTO ADJUSTMENT" (SUPPLEMENT-1 see page 6), Choose ALL and do the re-adjustment of each item of DVD-SL, CD and DVD-DL.**

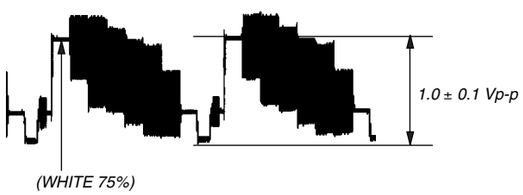
**THE PART THAT THE RE-ADJUSTMENT OF THE SERVO CIRCUIT IS NECESSARY**
**11. Optical pick-up**
**12. RF AMP (IC001)**
**13. DSP IC (IC302)**
**14. Motor driver IC (IC401)**
**15. EEPROM (IC303)**

Note :
1. DVD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use HLX-504 (J-6090-088-A) or HLX-505 (J-6090-089-A) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

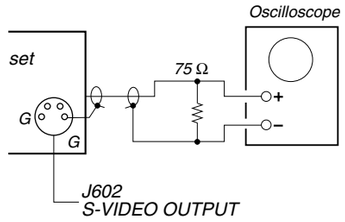
**Video Level Adjustment (MB BOARD)**
**Purpose**
This adjustment is made to satisfy the NTSC standard, and if not adjusted correctly, the brightness will be too large or small.




**Procedure:**
1. Connect oscilloscope to VIDEO output.
2. Load a disc (HLX-504 or HL-505) playback.
3. Adjust the RV501 to attain 1.0±0.1Vp-p.

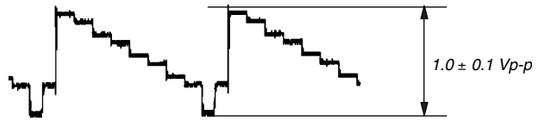



**S-terminal Output Check**
**Purpose**
Check S-video output.




**Procedure:**
1. Connect oscilloscope to S-VIDEO out. (S-Y teminal)
2. Load a disc (HLX-504 or HL-505) playback.

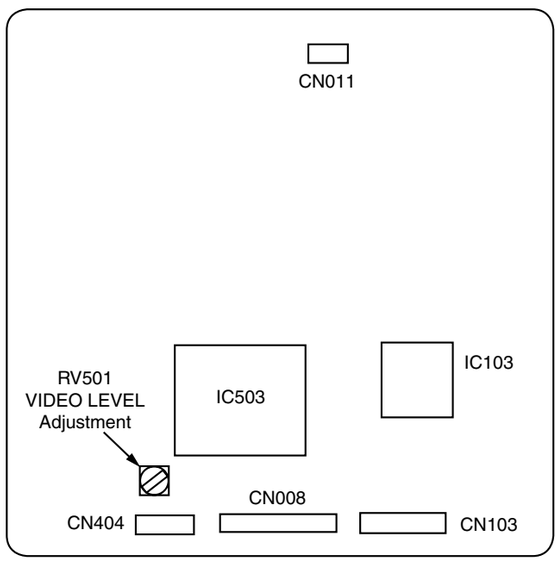
3. Confirm that the S-Y level is 1.0 ± 0.1Vp-p.




4. Connect oscilloscope to S-VIDEO output. (S-C teminal)
5. Connect that the S-C burst is 286 ± 50mVp-p.

**Adjustment Location**

**MB BOARD (SIDE A)**






# SECTION 6
# DIAGRAMS

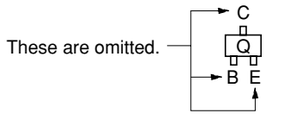
**THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.**
**(In addition to this, the necessary note is printed in each block.)**

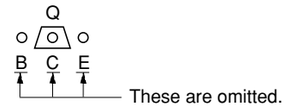
**Note on Schematic Diagram:**
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : fusible resistor.
- : panel designation.

| **Note:** | **Note:** |
|---|---|
| The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified. | Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié. |

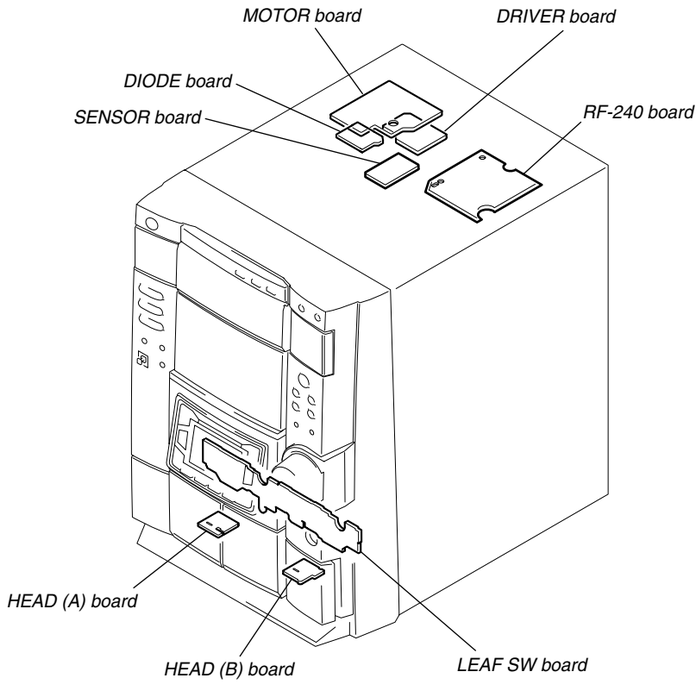
- : B+ Line.
- : B– Line.
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : FM
  - : AM
  - : PB (DECK A)
  - : PB (DECK B)
  - : REC (DECK B)
  - : digital out
  - : MD (VIDEO)
- Abbreviation
  - CND : Canadian model
  - EA : Saudi Arabia model
  - MY : Malaysia model
  - SP : Singapore model
  - TH : Thai model
  - MX : Mexican model
  - E91 : 220V AC area model
  - AUS : Australian model

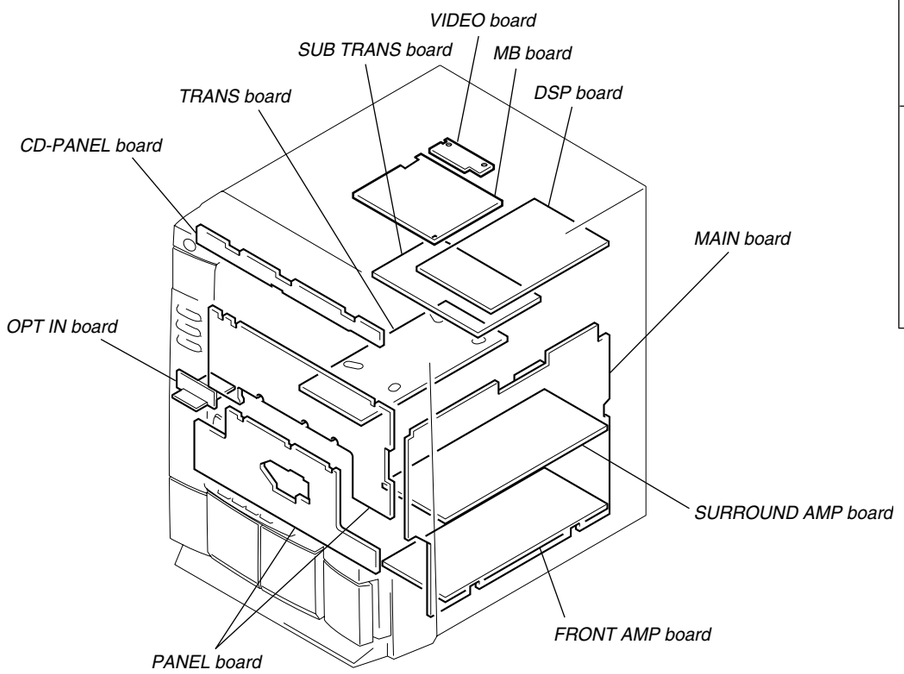
**Note on Printed Wiring Boards:**
- : parts extracted from the component side.
- : Pattern from the side which enables seeing.
- Indication of transistor.



## 6-1. CIRCUIT BOARD LOCATION




● **WAVEFORMS**

**– MB BOARD –**

① IC102 ⑧ XTO

27MHz

② IC102 ⑨ 512-2OUT

DVD STOP : 22.5792MHz
DVD PLAY : 24.576MHx

③ IC102 ⑬ 33-2OUT

33.8688MHz

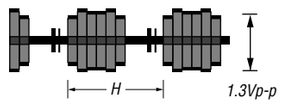
④ IC102 ③ 27-1OUT

27MHz

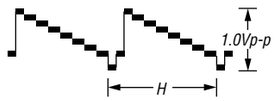
⑤ IC103 ㉝ X1

16.5MHz

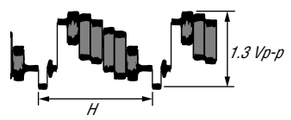
⑥ IC701 ② INA



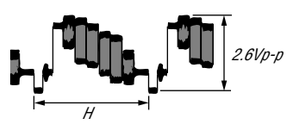

⑦ IC701 ④ INB



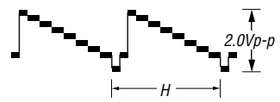

⑧ IC701 ⑦ INC



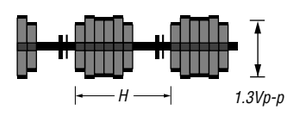

⑨ IC701 ⑨ OUT C2




⑩ IC701 ⑫ OUT B2

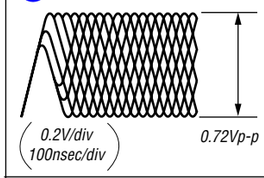



⑪ IC701 ⑮ OUT A1

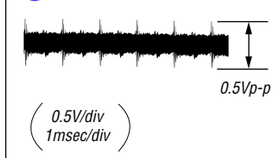



**– PF-240 BOARD –**

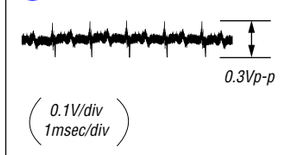
① IC001 ② RFIN



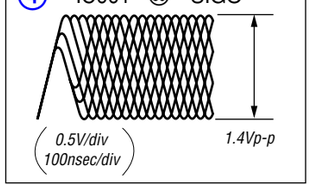

② IC001 ㊶ TE




③ IC001 ㊷ FE

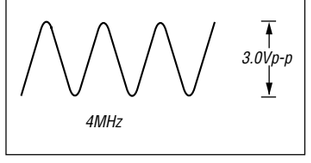



④ IC001 ㊾ SIGO




**– PANEL BOARD –**

① IC1101 ㉜ XO




4MHz

**– MAIN BOARD –**

① NO303 ⑧ E-HOT

80kHz

② T301 ④

80kHz

③ IC401 ⑪ XC-OUT

32.768kHz

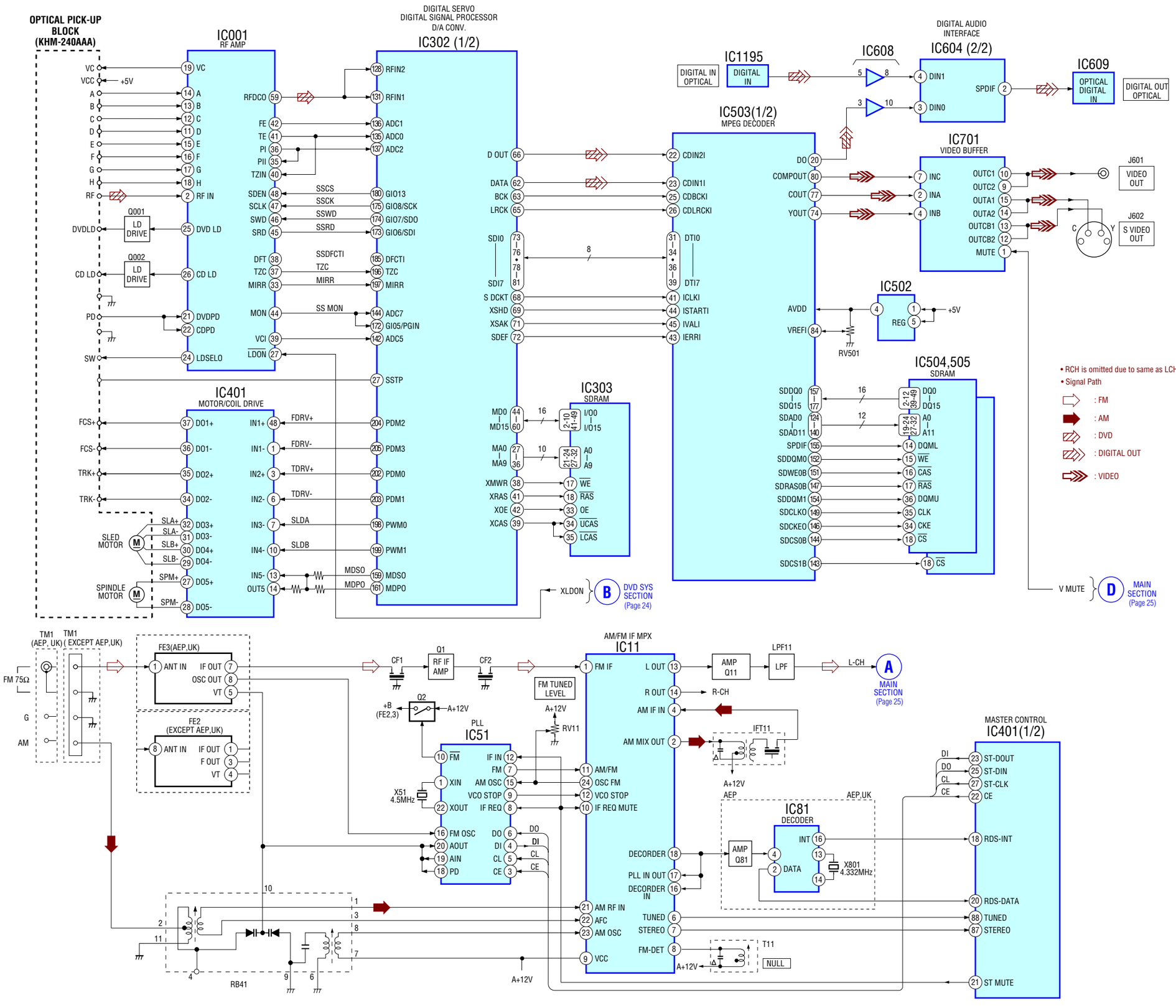
④ IC401 ⑬ X-OUT

16MHz

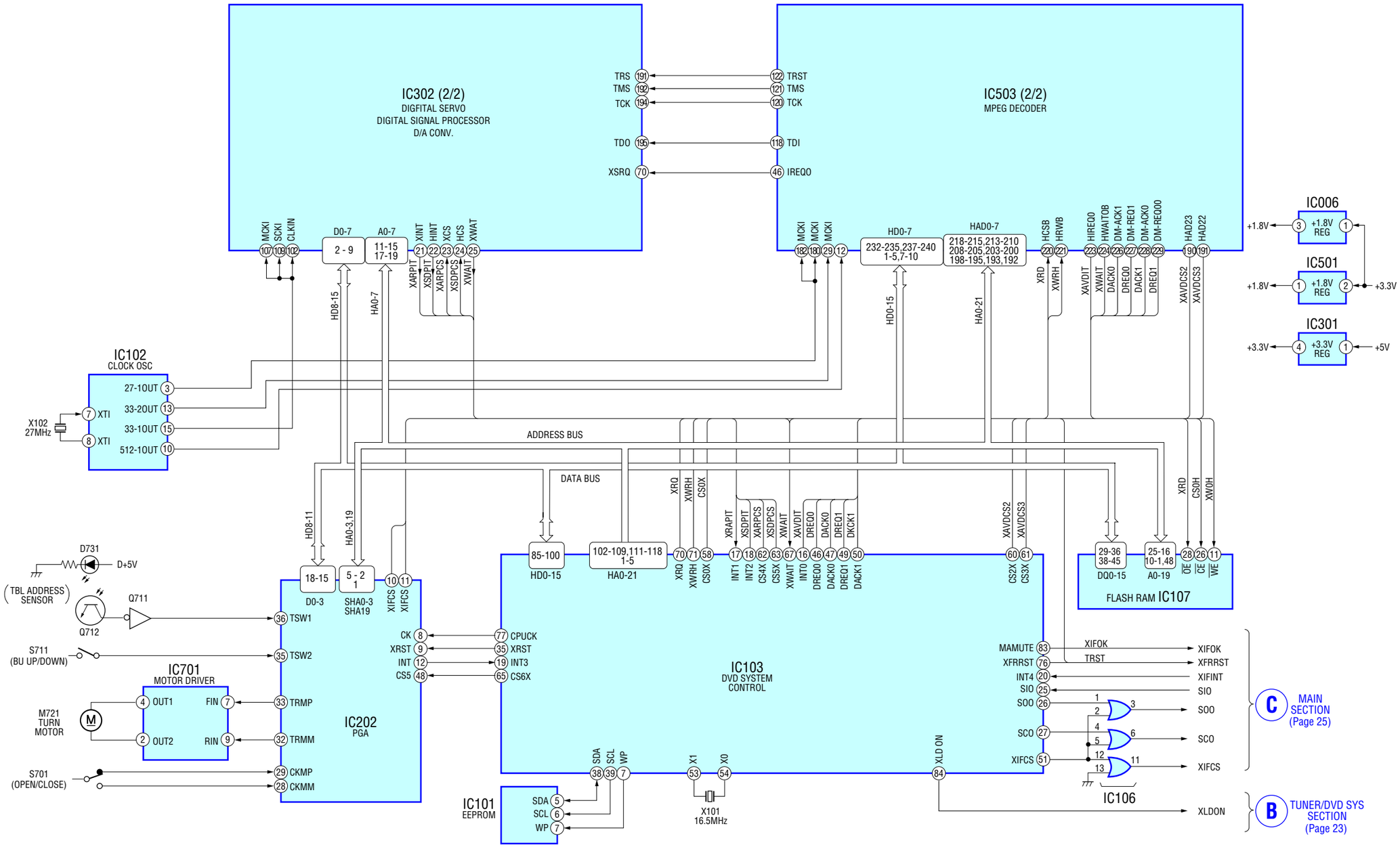
⑤ IC51 ㉒ XOUT

4.5MHz

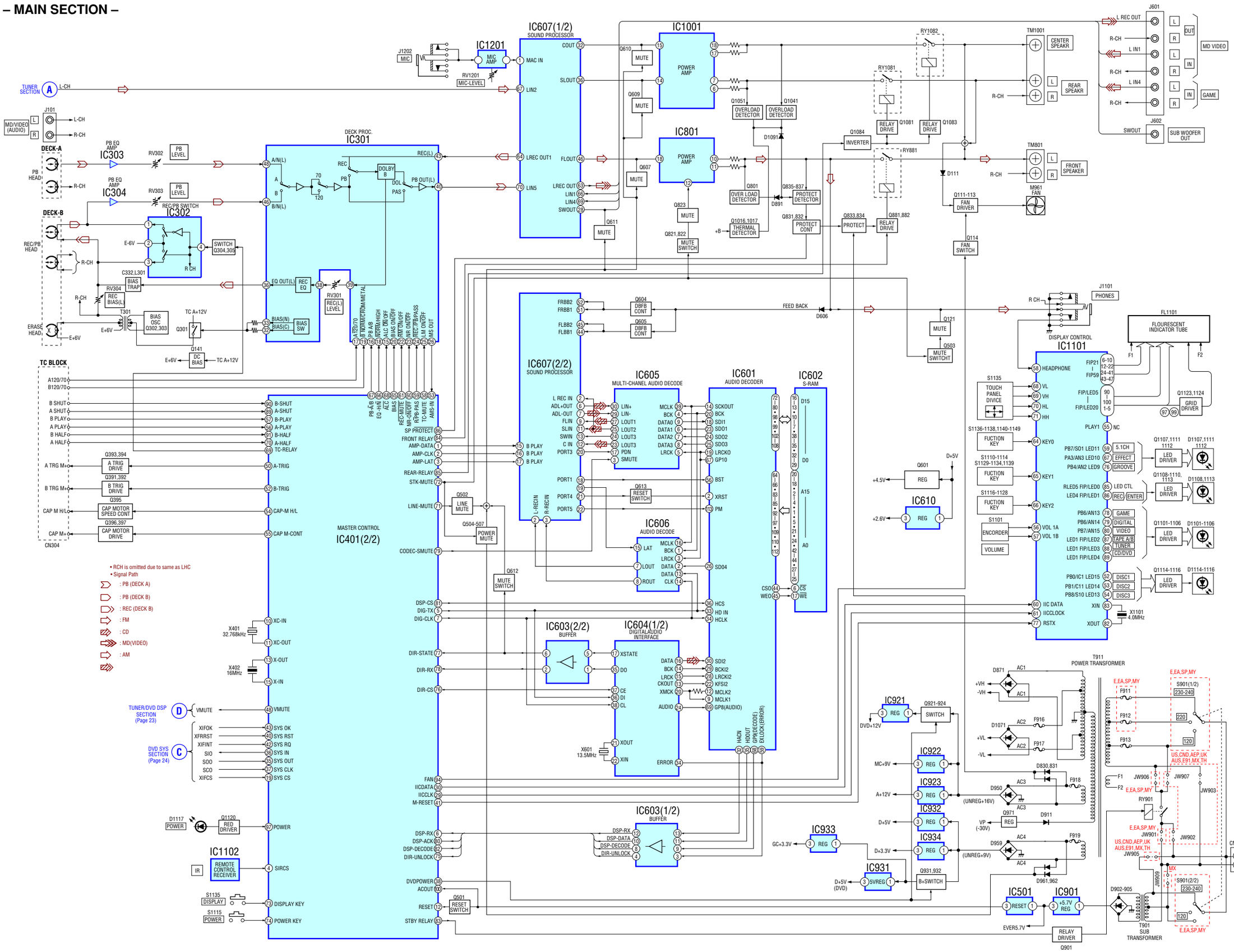
## 6-2. BLOCK DIAGRAMS
### – TUNER/DVD DSP SECTION –



## – DVD SYS SECTION –

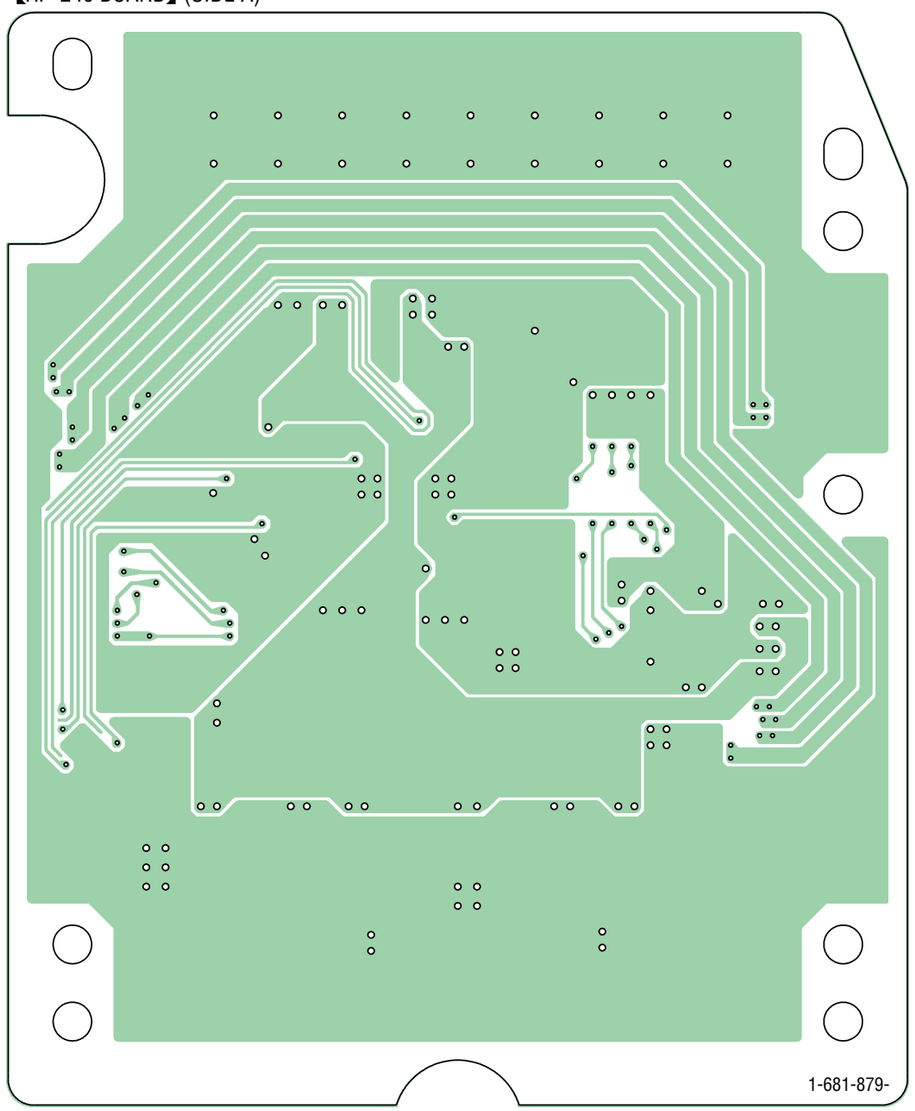


## – MAIN SECTION –



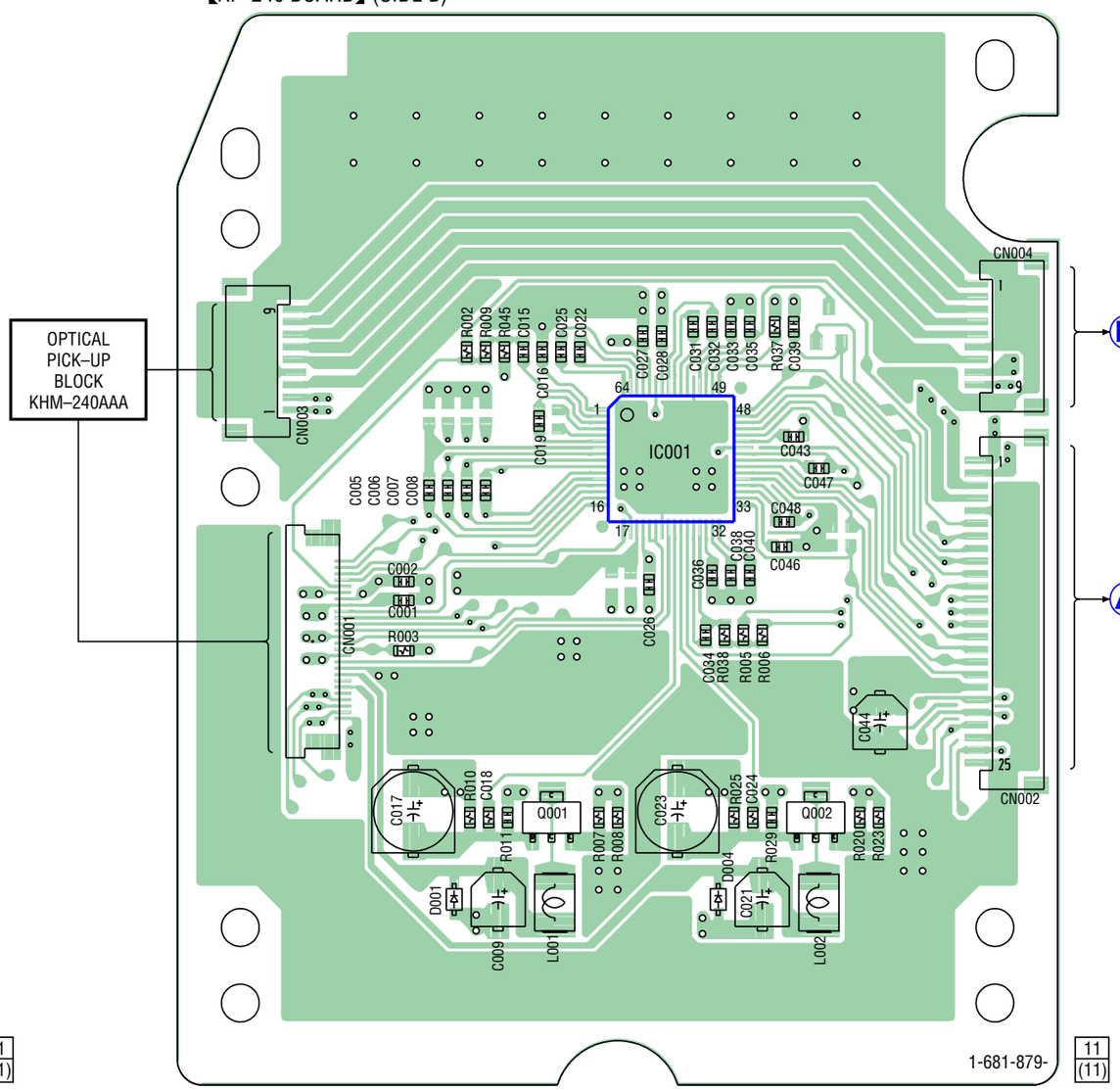
### 6-3. PRINTED WIRING BOARD – RF-240 SECTION – • See page 22 for Circuit Boards Location.

【RF–240 BOARD】(SIDE A)



1-681-879-

【RF–240 BOARD】(SIDE B)

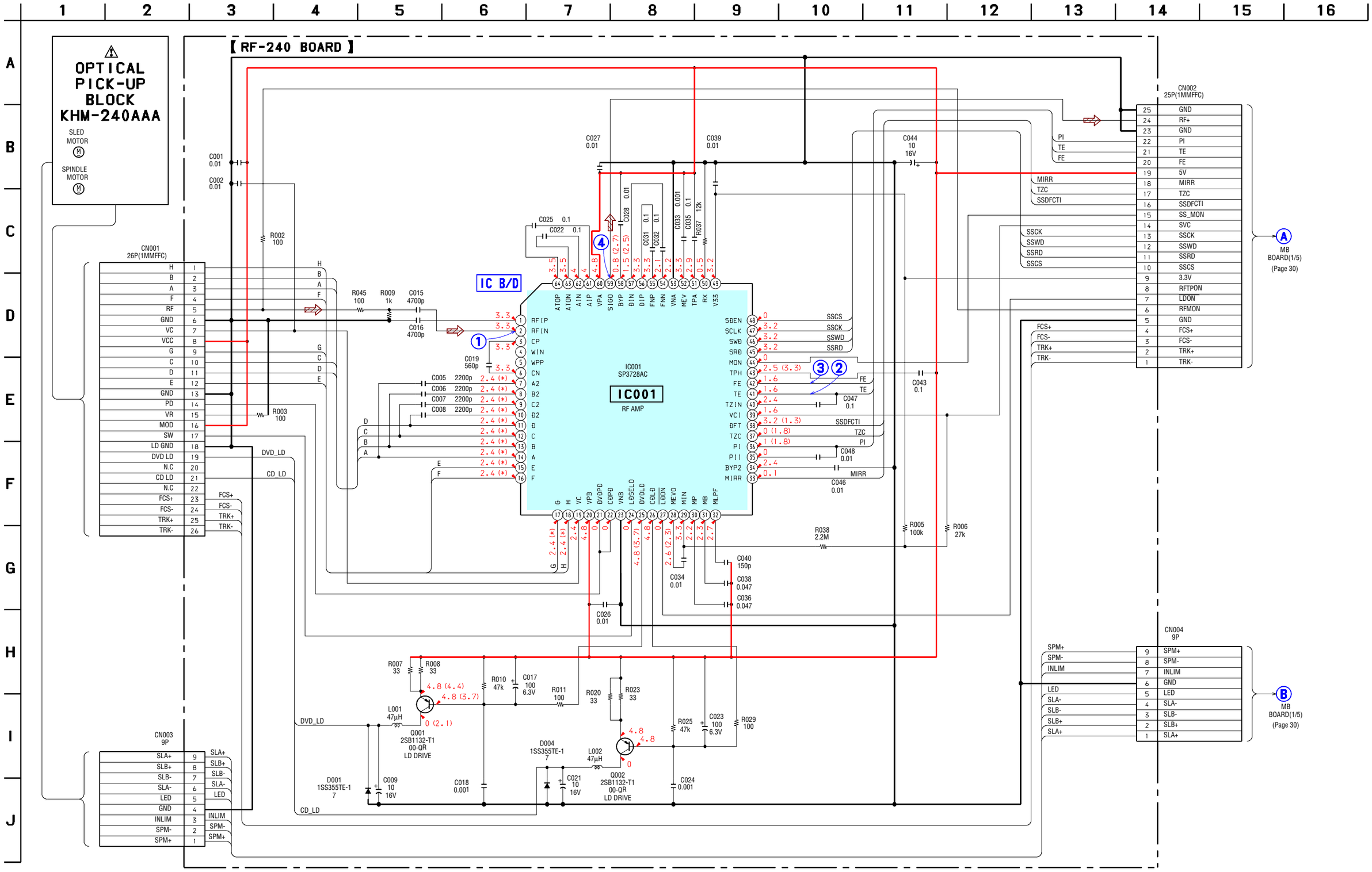



1-681-879-

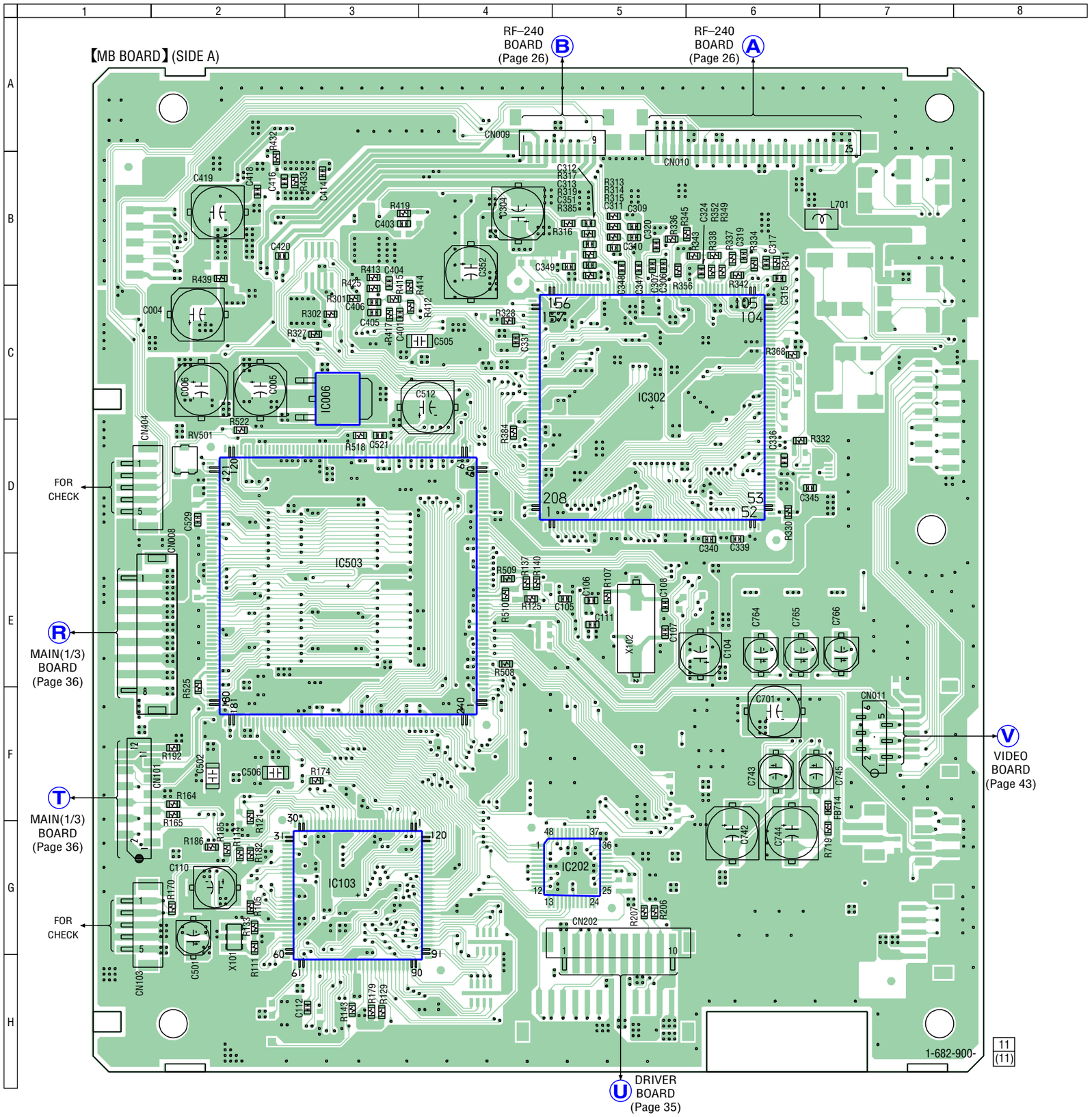
• **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D001 | E-7 |
| D004 | E-9 |
| IC001 | C-8 |
| Q001 | E-8 |
| Q002 | E-9 |

6-4. SCHEMATIC DIAGRAM – RF-240 SECTION – • See page 22 for Waveforms. • See page 64 for IC Block Diagrams.



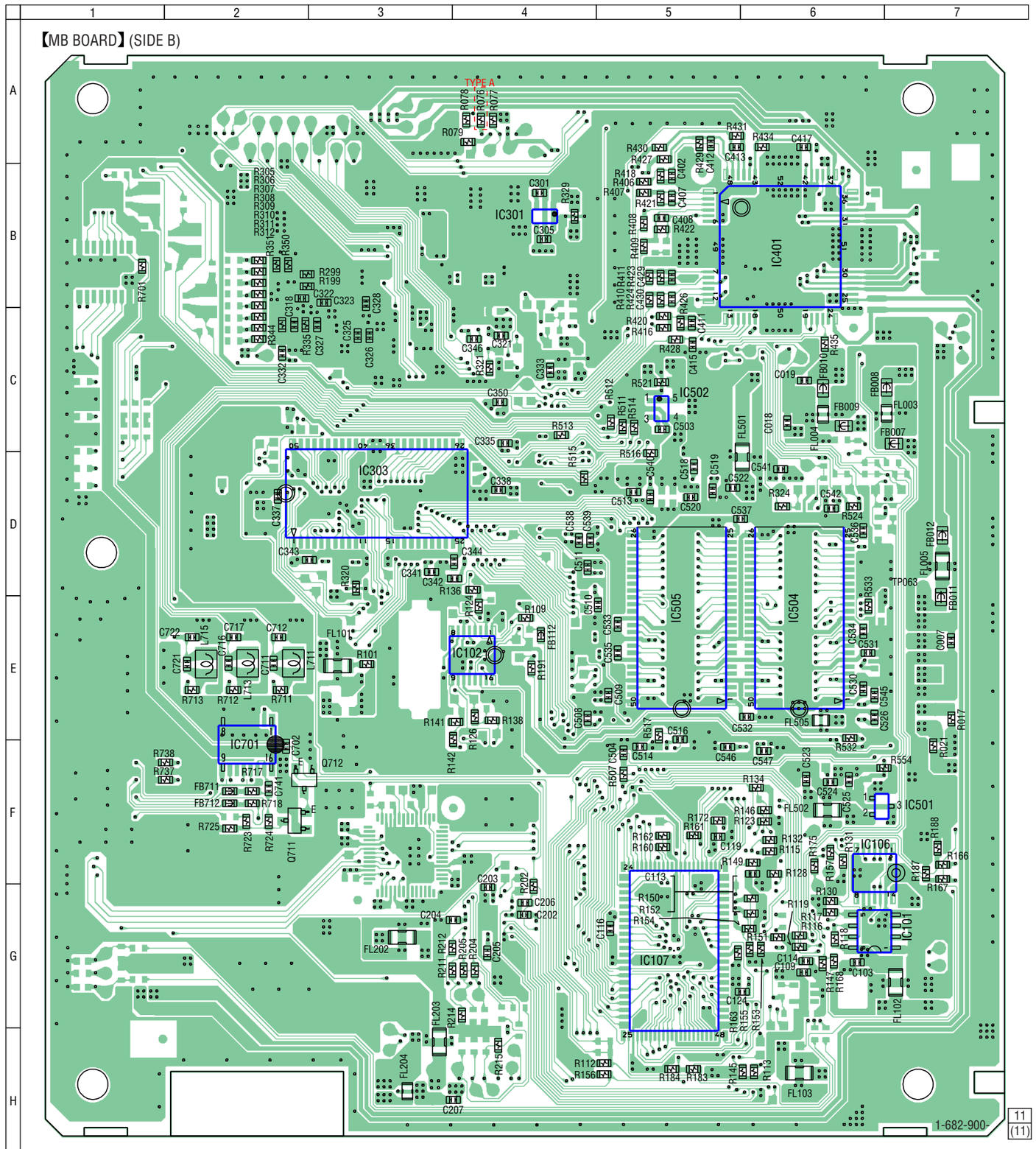
## 6-5.PRINTED WIRING BOARD – MB SECTION – • See page 22 for Circuit Boards Location.




• **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| IC006 | C-3 |
| IC103 | G-3 |
| IC202 | G-5 |
| IC302 | C-5 |
| IC503 | E-3 |

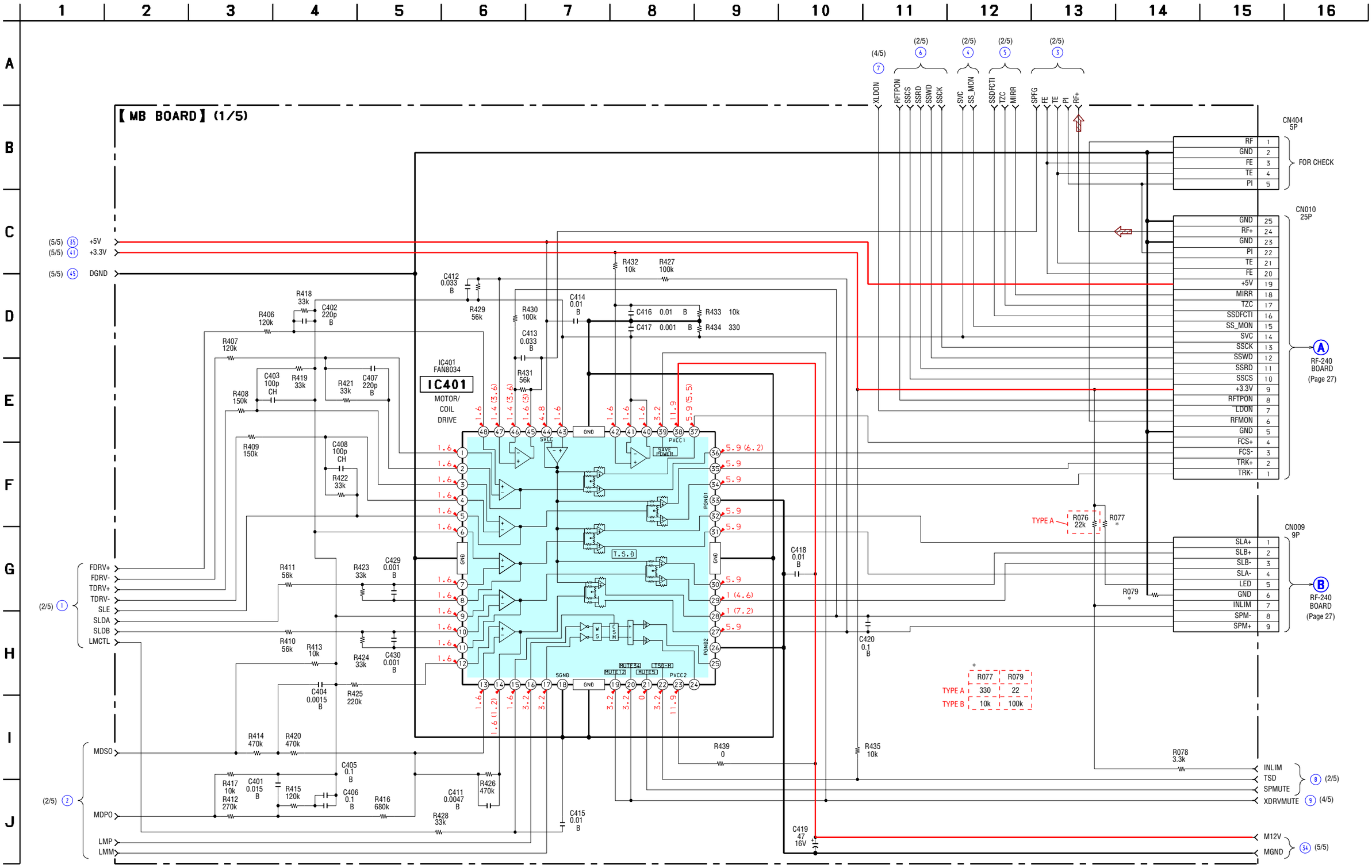
【MB BOARD】(SIDE B)



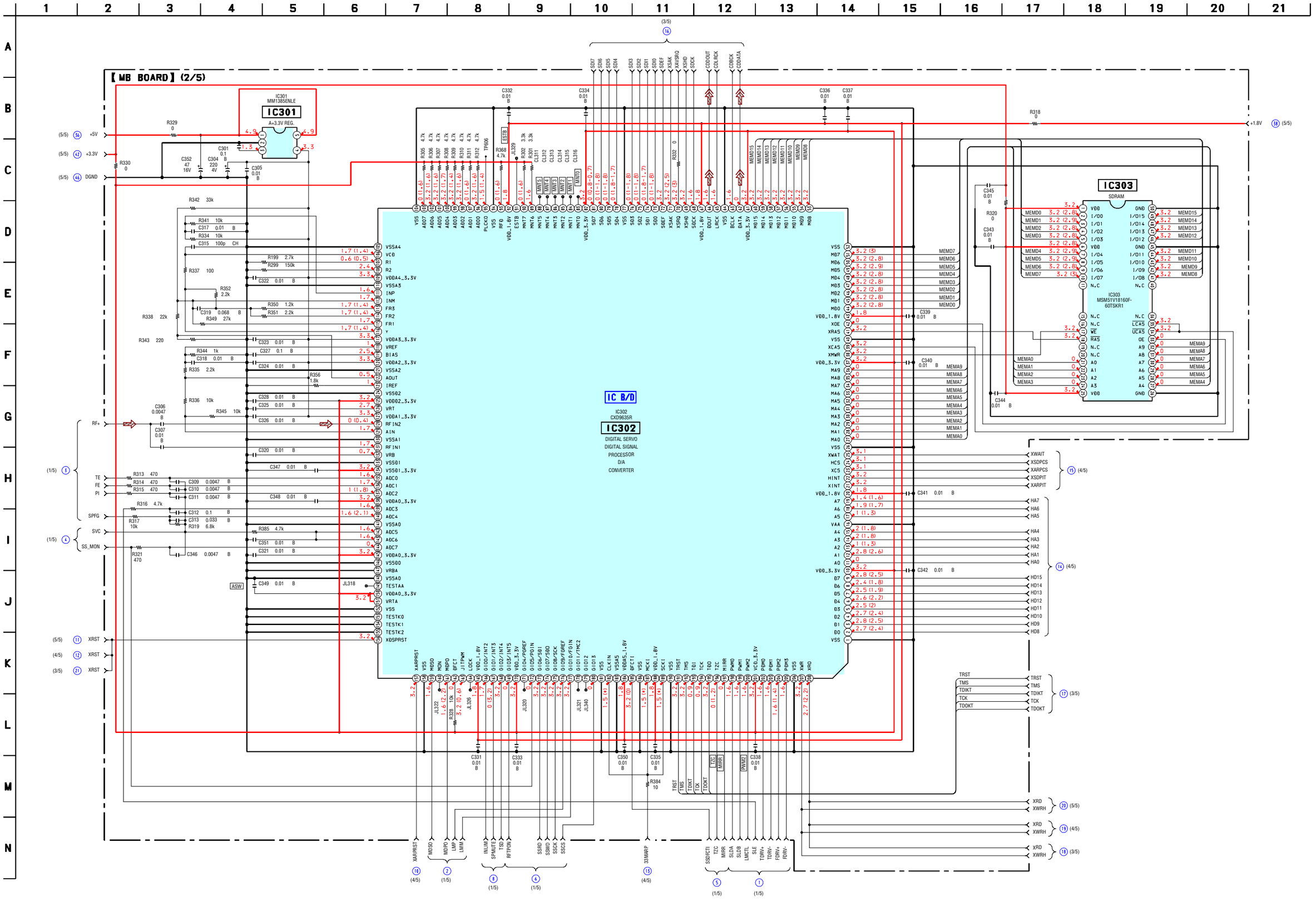

• **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| IC101 | G-6 |
| IC102 | E-4 |
| IC106 | F-6 |
| IC107 | G-5 |
| IC301 | B-4 |
| IC303 | D-3 |
| IC401 | B-6 |
| IC501 | F-6 |
| IC502 | C-5 |
| IC504 | E-6 |
| IC505 | E-5 |
| IC701 | F-2 |
| Q711 | F-2 |
| Q712 | F-2 |

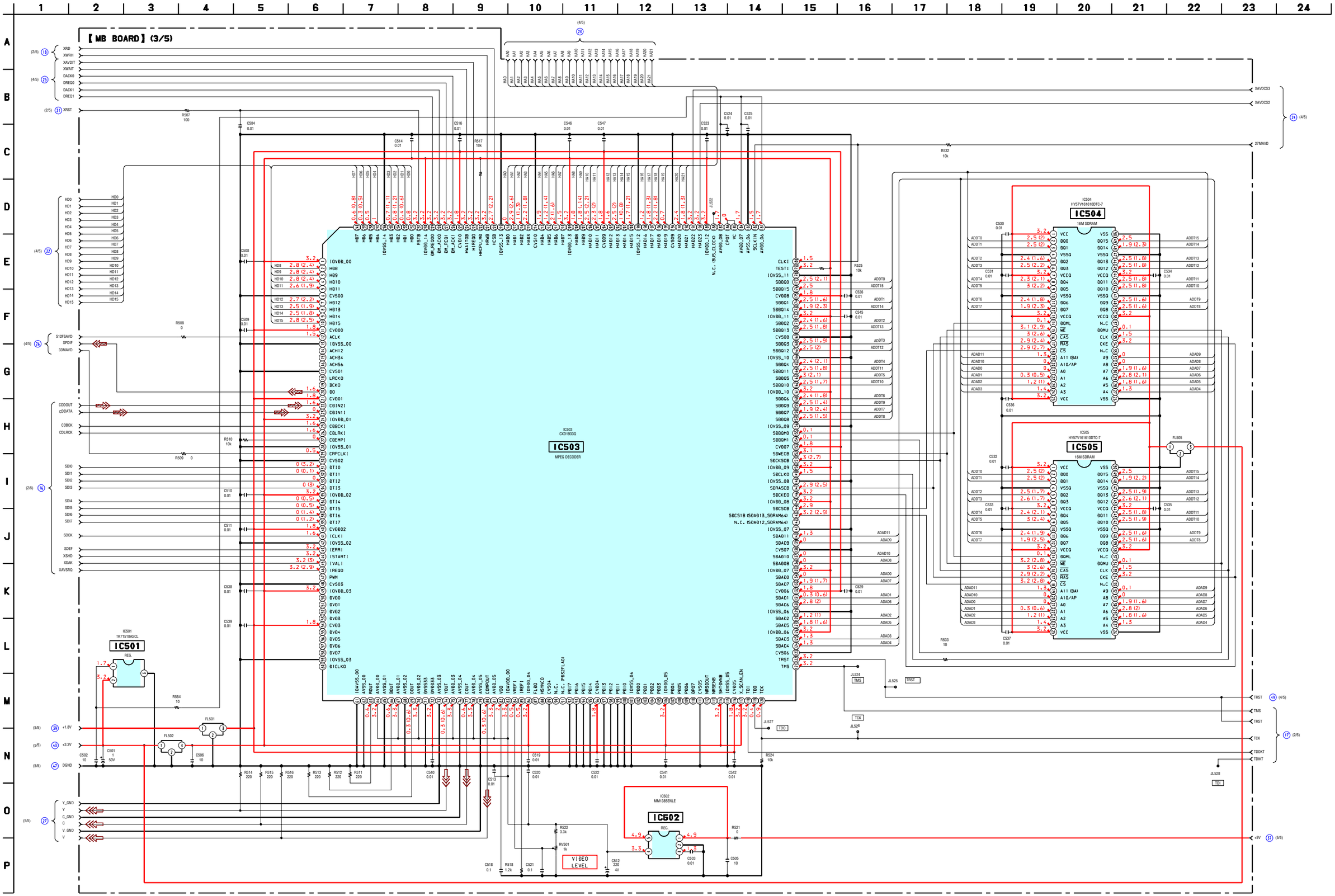
## 6-6. SCHEMATIC DIAGRAM – MB(1/5) SECTION –



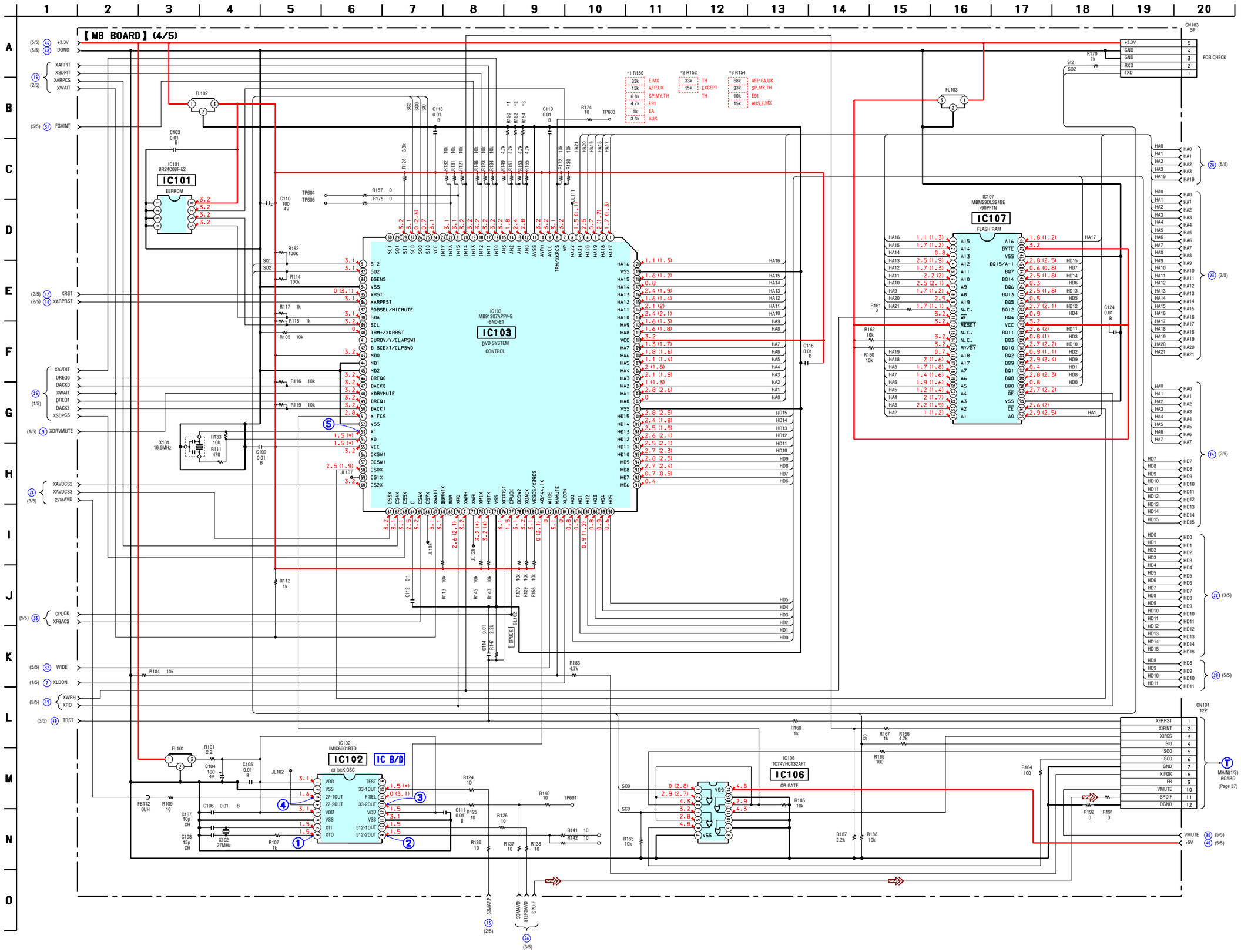
## 6-7. SCHEMATIC DIAGRAM – MB(2/5) SECTION – • See page 61 for IC Block Diagrams.



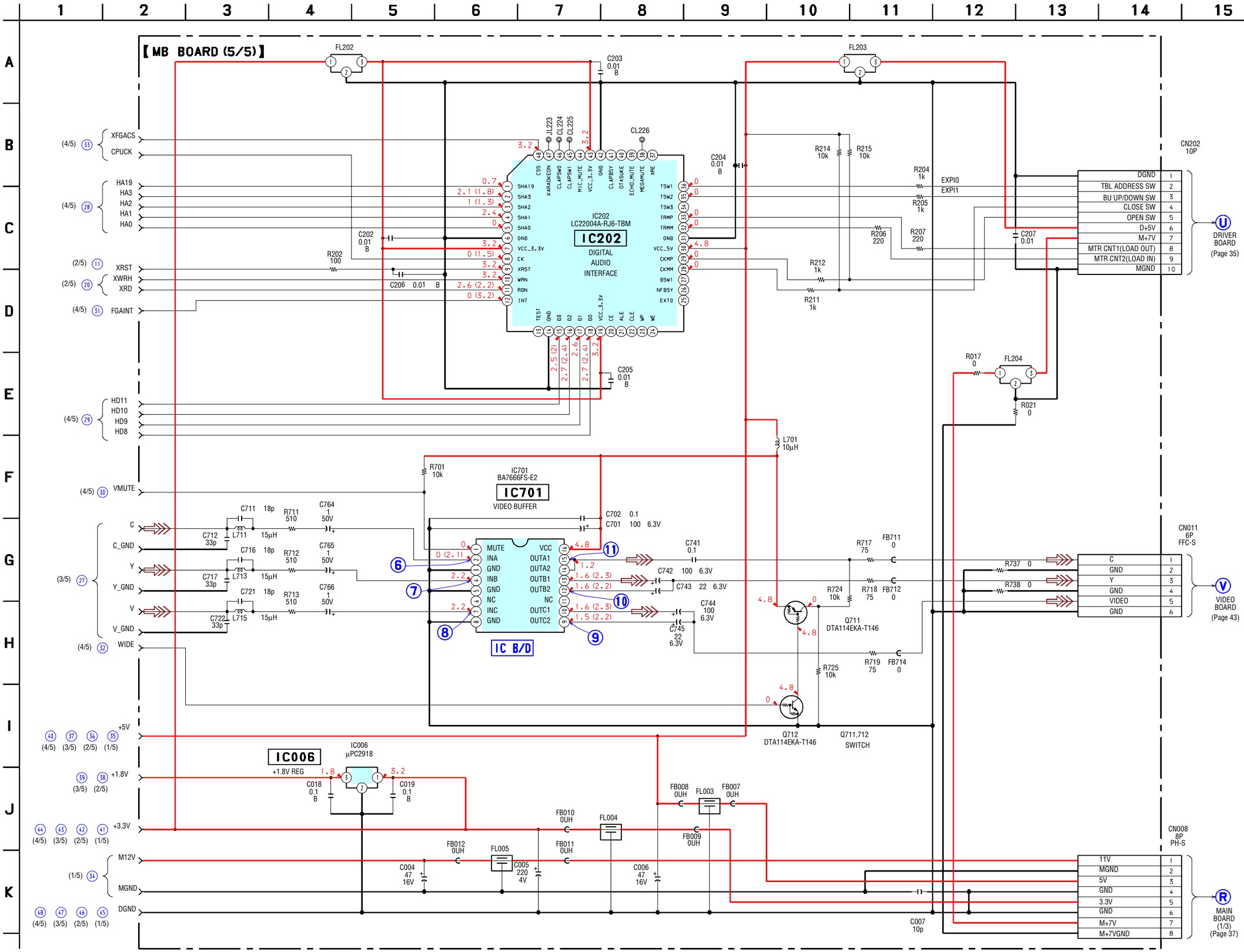
## 6-8. SCHEMATIC DIAGRAM – MB(3/5) SECTION –



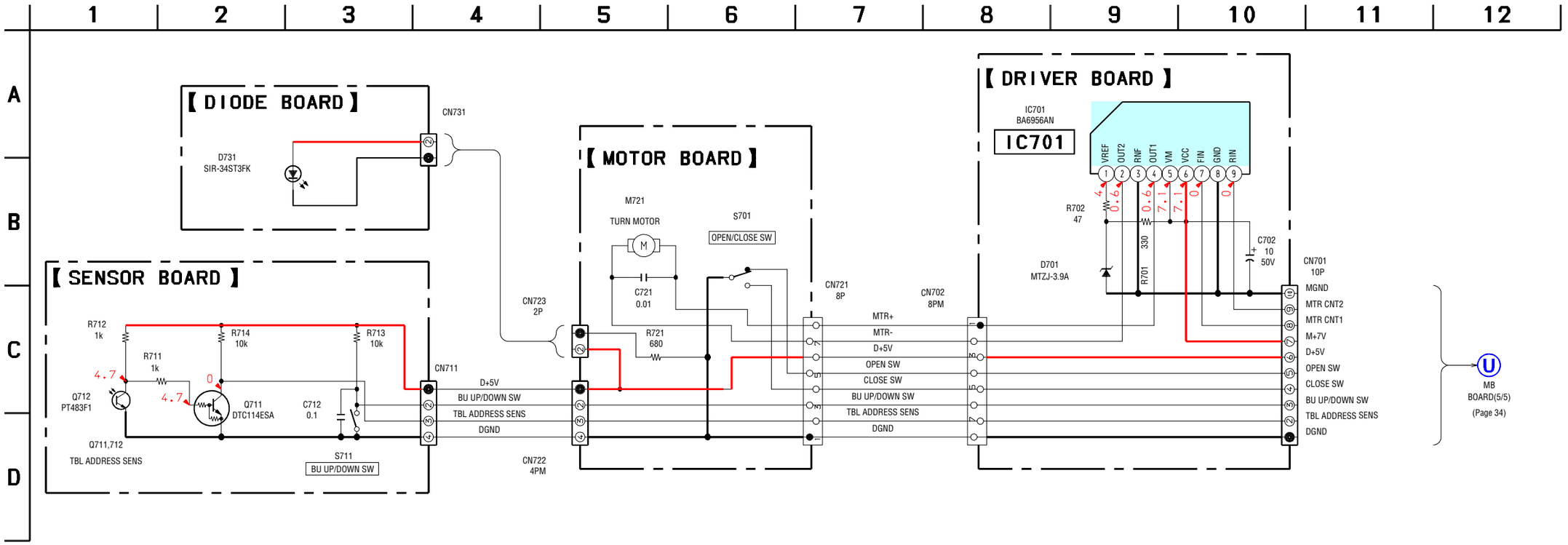
## 6-9. SCHEMATIC DIAGRAM – MB(4/5) SECTION – • See page 22 for Waveforms. • See page 61 for IC Block Diagrams. • See page 54 for IC Pin Function.



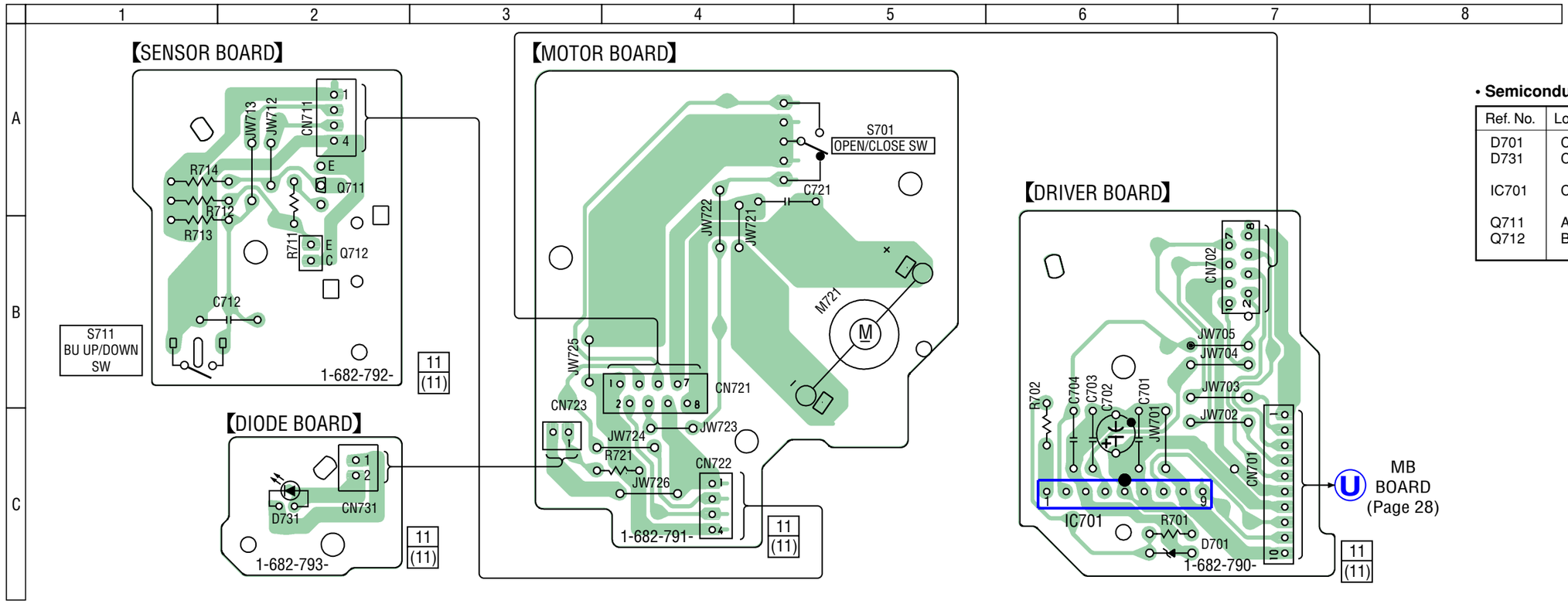
## 6-10. SCHEMATIC DIAGRAM – MB(5/5) SECTION – • See page 22 for Waveforms. • See page 63 for IC Block Diagrams.



## 6-11. SCHEMATIC DIAGRAM – DRIVER SECTION –




## 6-12.PRINTED WIRING BOARD – DRIVER SECTION – • See page 22 for Circuit Boards Location.



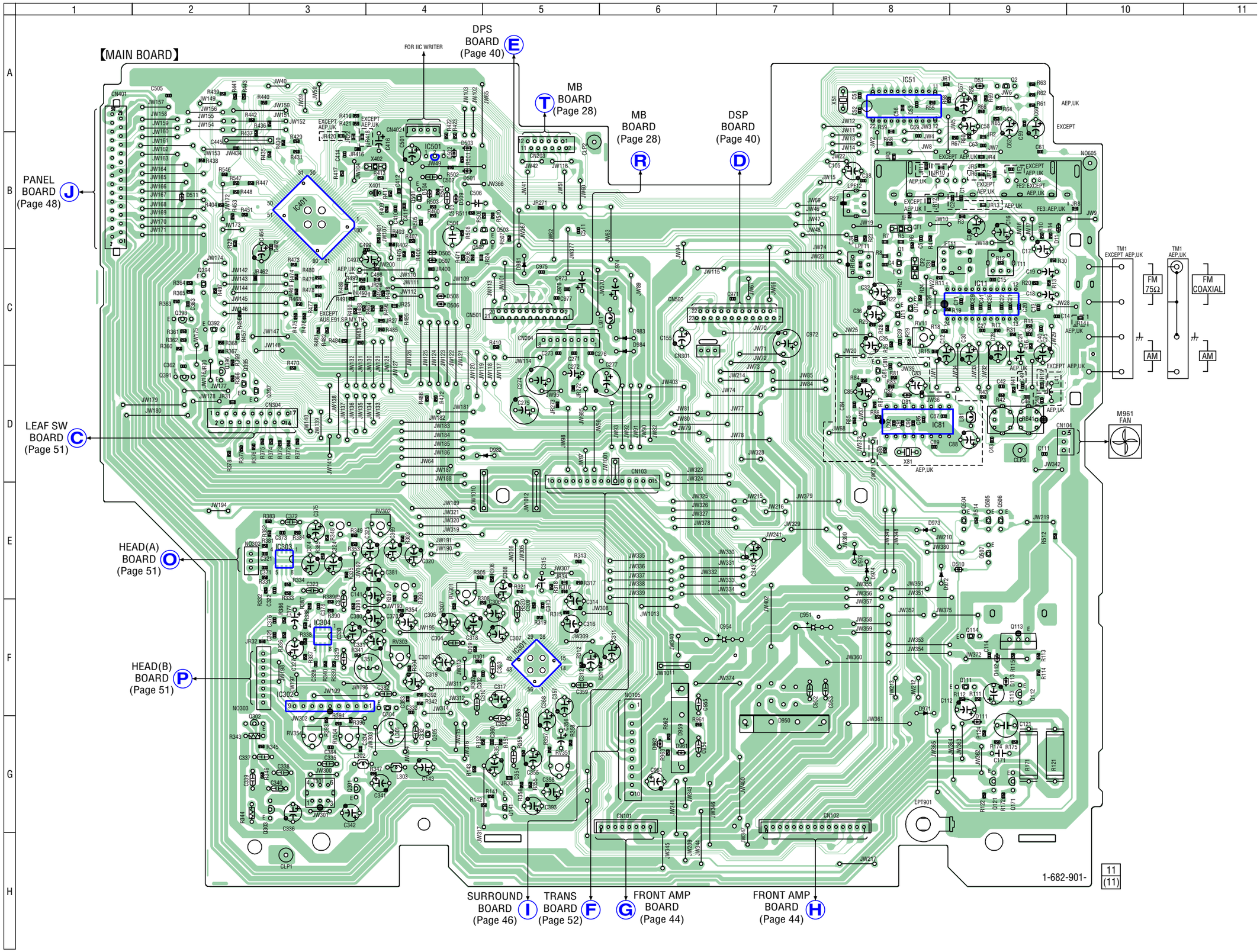

• **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D701 | C-6 |
| D731 | C-2 |
| IC701 | C-6 |
| Q711 | A-2 |
| Q712 | B-2 |

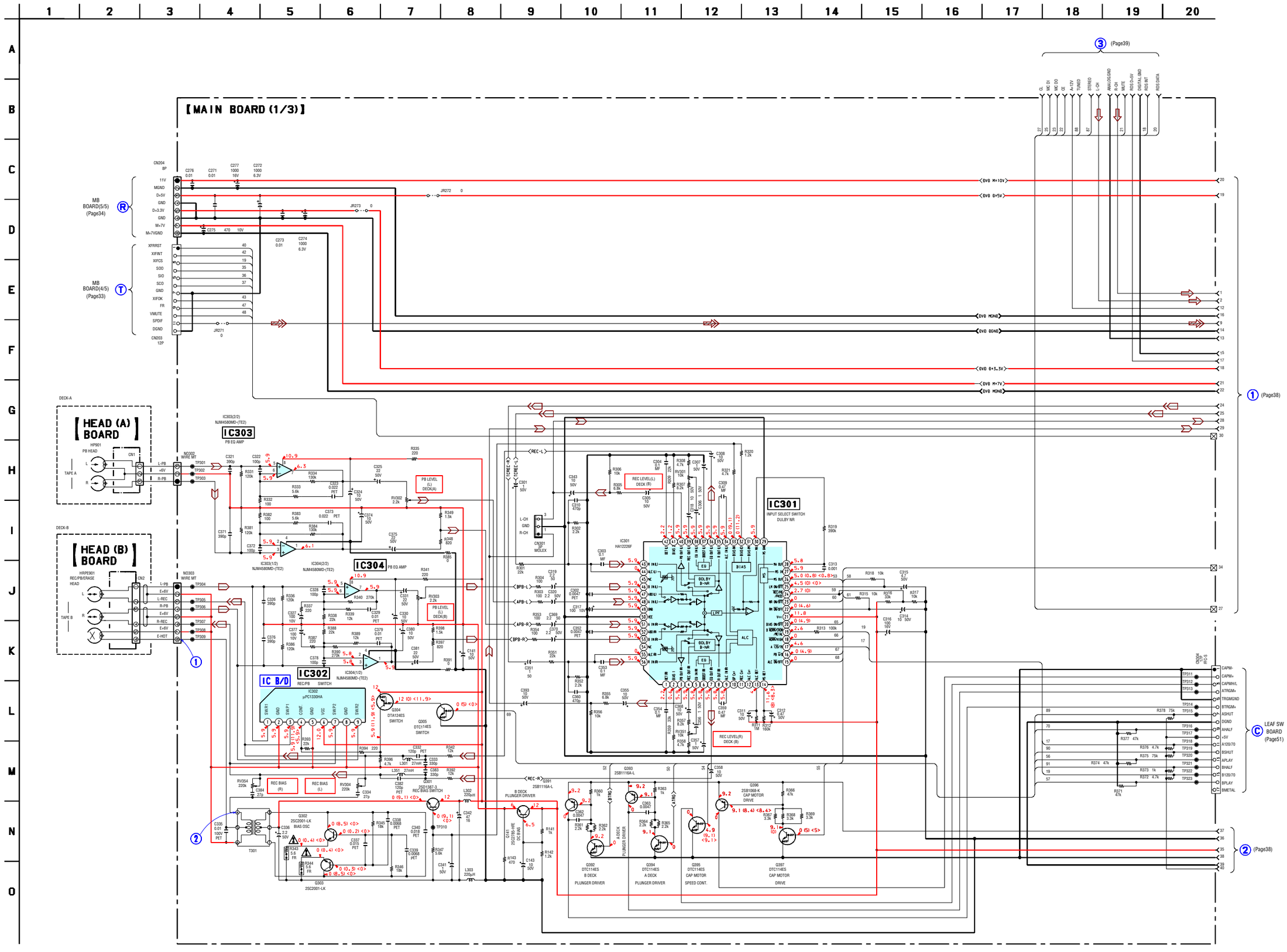
## 6-13. PRINTED WIRING BOARD – MAIN SECTION – • See page 22 for Circuit Boards Location.

• **Semiconductor Location**

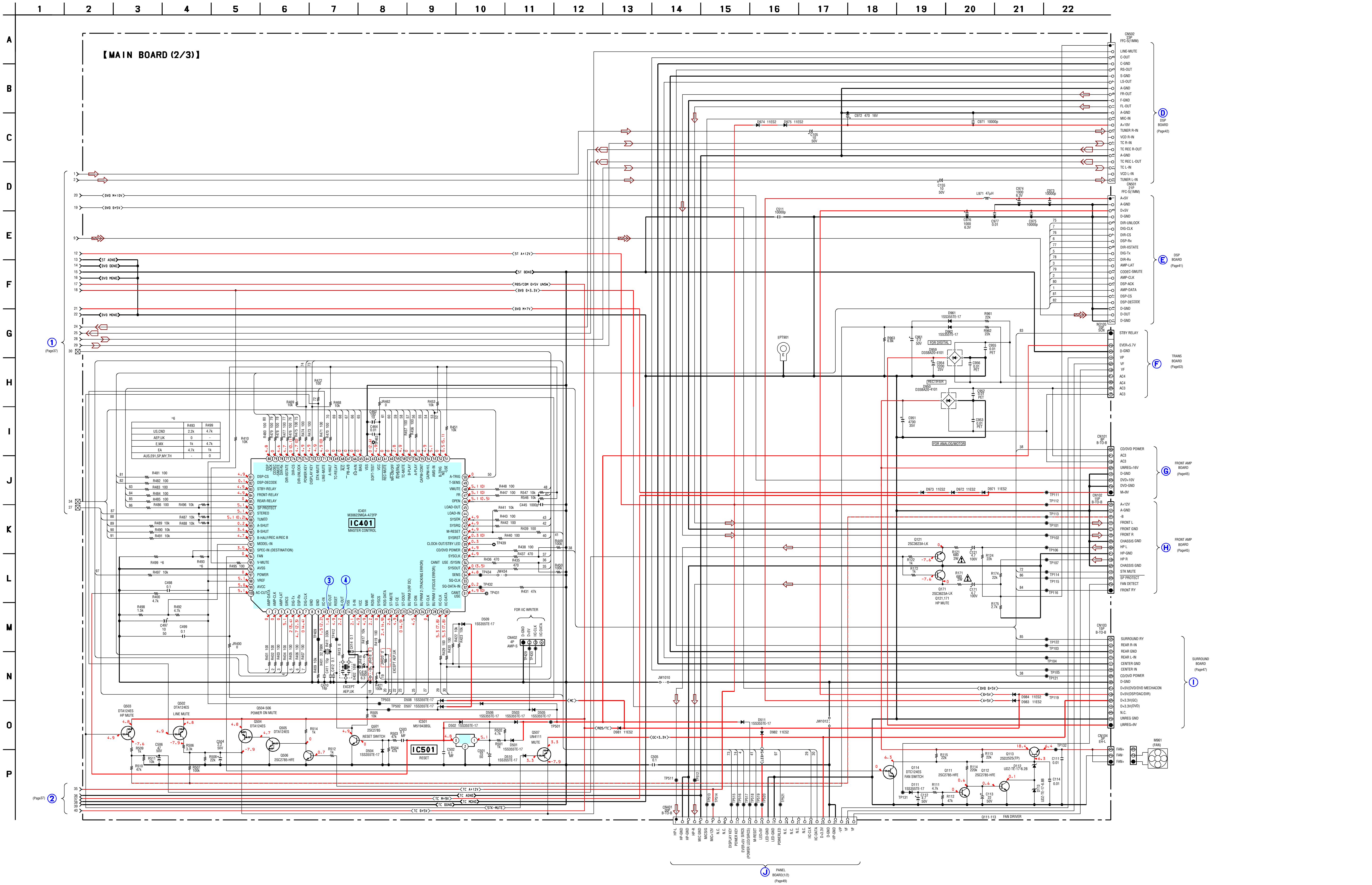
| Ref. No. | Location |
|---|---|
| D51 | A-9 |
| D81 | D-8 |
| D111 | G-9 |
| D112 | F-9 |
| D113 | F-9 |
| D501 | B-4 |
| D502 | B-4 |
| D503 | B-4 |
| D504 | B-4 |
| D505 | C-4 |
| D506 | C-4 |
| D507 | C-4 |
| D508 | C-4 |
| D509 | B-4 |
| D510 | E-9 |
| D511 | B-2 |
| D950 | G-6 |
| D959 | G-6 |
| D961 | G-6 |
| D962 | G-6 |
| D971 | F-8 |
| D972 | E-8 |
| D973 | E-8 |
| D974 | E-8 |
| D975 | E-8 |
| D981 | C-5 |
| D982 | D-5 |
| D983 | C-6 |
| D984 | C-6 |
| | |
| IC11 | C-9 |
| IC51 | A-8 |
| IC81 | D-8 |
| IC301 | F-5 |
| IC302 | F-2 |
| IC303 | E-3 |
| IC304 | F-3 |
| IC401 | B-3 |
| IC501 | B-4 |
| | |
| Q1 | C-8 |
| Q2 | A-9 |
| Q11 | C-8 |
| Q12 | C-8 |
| Q81 | D-8 |
| Q111 | F-9 |
| Q112 | F-9 |
| Q113 | F-9 |
| Q114 | F-9 |
| Q121 | G-9 |
| Q141 | G-5 |
| Q171 | G-9 |
| Q301 | G-3 |
| Q302 | G-3 |
| Q303 | G-3 |
| Q304 | F-4 |
| Q305 | G-4 |
| Q391 | D-2 |
| Q392 | C-2 |
| Q393 | C-2 |
| Q394 | C-2 |
| Q395 | D-2 |
| Q396 | D-2 |
| Q397 | D-3 |
| Q501 | B-4 |
| Q502 | B-5 |
| Q503 | B-5 |
| Q504 | E-9 |
| Q505 | E-9 |
| Q506 | E-9 |
| Q507 | E-9 |



## 6-14. SCHEMATIC DIAGRAM – MAIN (1/3) SECTION – • See page 22 for Waveforms. • See page 61 for IC Block Diagrams.

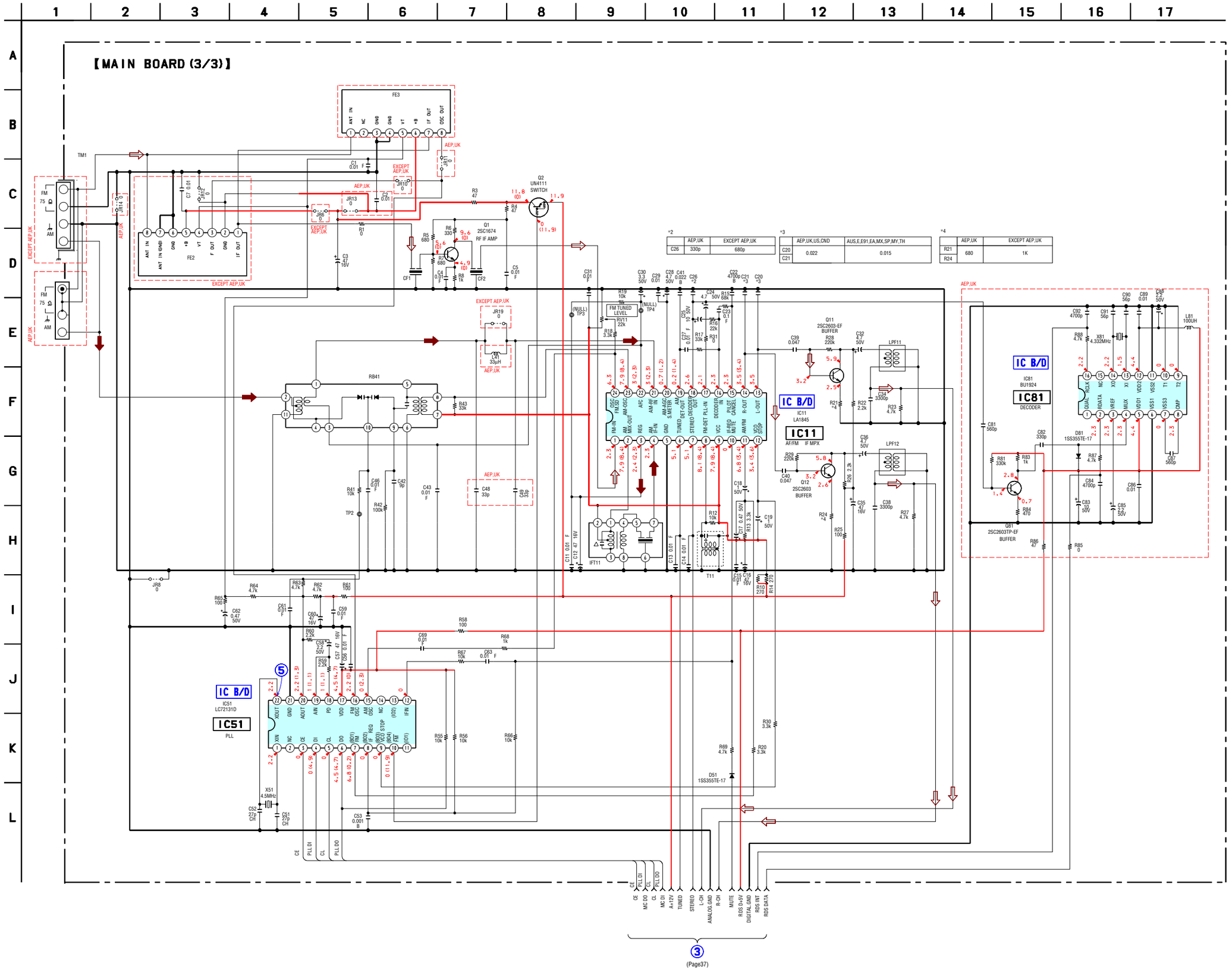


## 6-15. SCHEMATIC DIAGRAM – MAIN (2/3) SECTION – • See page 22 for Waveforms. • See page 56 for IC Pin Function.


[MAIN BOARD (2/3)]
IC401
M30622MGA-A72FP
MASTER CONTROL
IC501
M51943BSL
RESET
CN502 23P FFC-S(1MM)
D DSP BOARD (Page42)
CN501 21P FFC-S(1MM)
E DSP BOARD (Page41)
F TRANS BOARD (Page53)
CN101 8P B-TO-B
G FRONT AMP BOARD (Page45)
CN102 15P B-TO-B
H FRONT AMP BOARD (Page45)
CN103 15P B-TO-B
I SURROUND BOARD (Page47)
CN104 3P EH-L
M961 (FAN)
CN401 30P B-TO-B
J PANEL BOARD(1/2) (Page49)
1 (Page37)
2 (Page37)
FOR DIGITAL
RECTIFIER
FOR ANALOG/MOTOR
FOR IIC WRITER
Q121,171 HP MUTE
Q111-113 FAN DRIVER
Q504-506 POWER ON MUTE

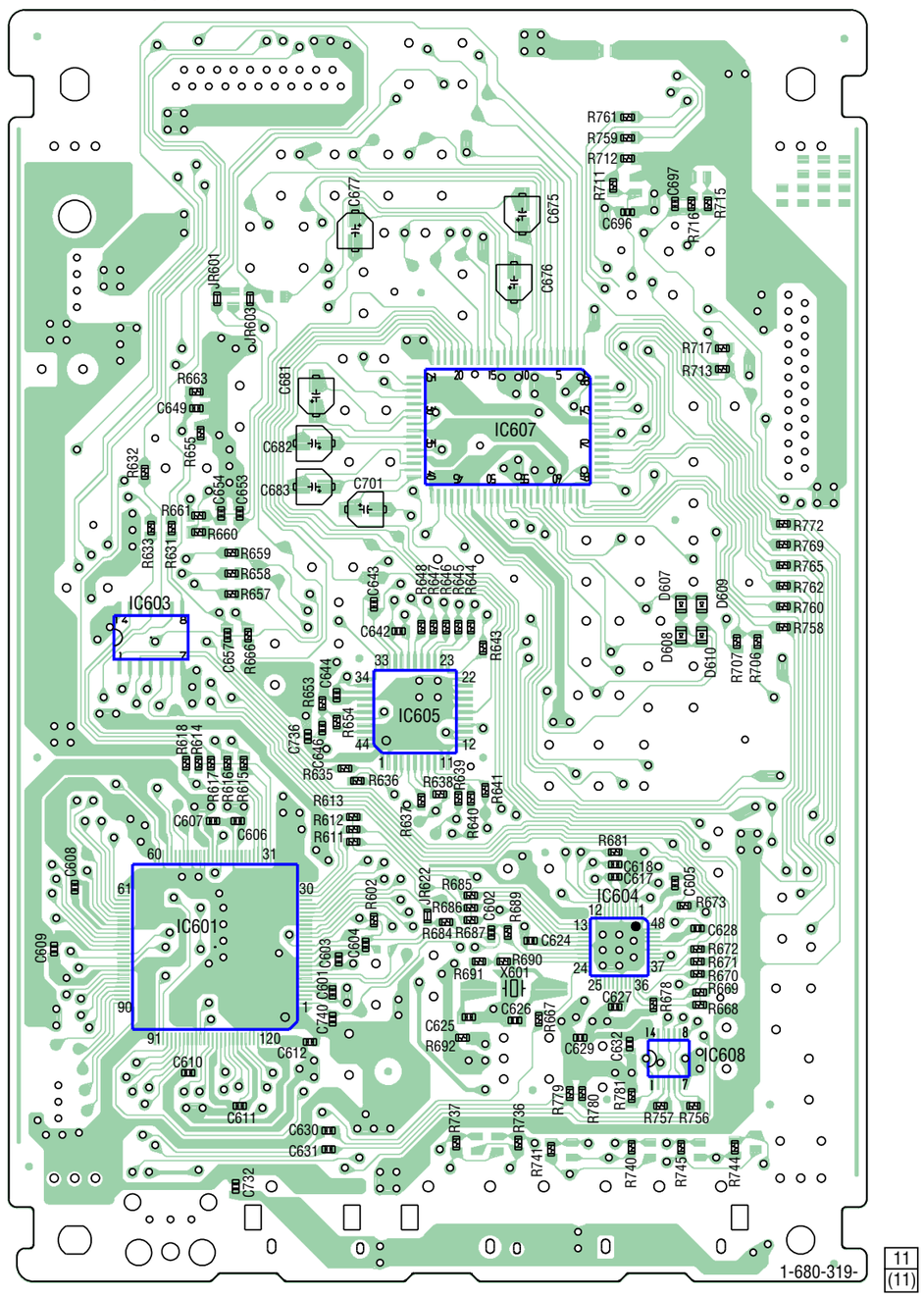
| | R493 | R499 |
|---|---|---|
| US,CND | 2.2k | 4.7k |
| AEP,UK | 0 | - |
| E,MX | 1k | 4.7k |
| EA | 4.7k | 1k |
| AUS,E91,SP,MY,TH | - | 0 |

## 6-16. SCHEMATIC DIAGRAM – MAIN (3/3) SECTION – • See page 22 for Waveforms. • See page 62,63 for IC Block Diagrams.

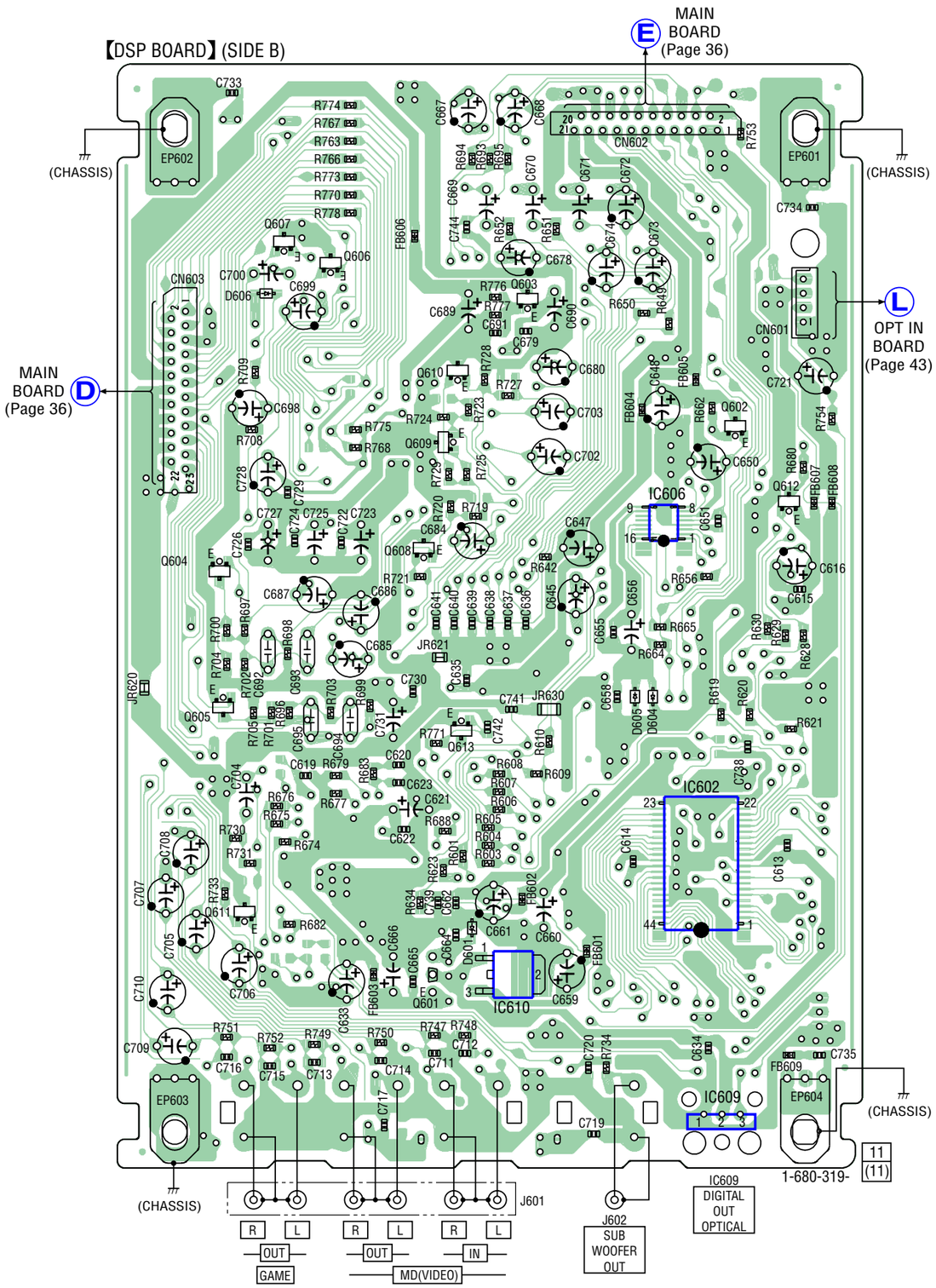


## 6-17. PRINTED WIRING BOARD – DSP SECTION – • See page 22 for Circuit Boards Location.

【DSP BOARD】(SIDE A)



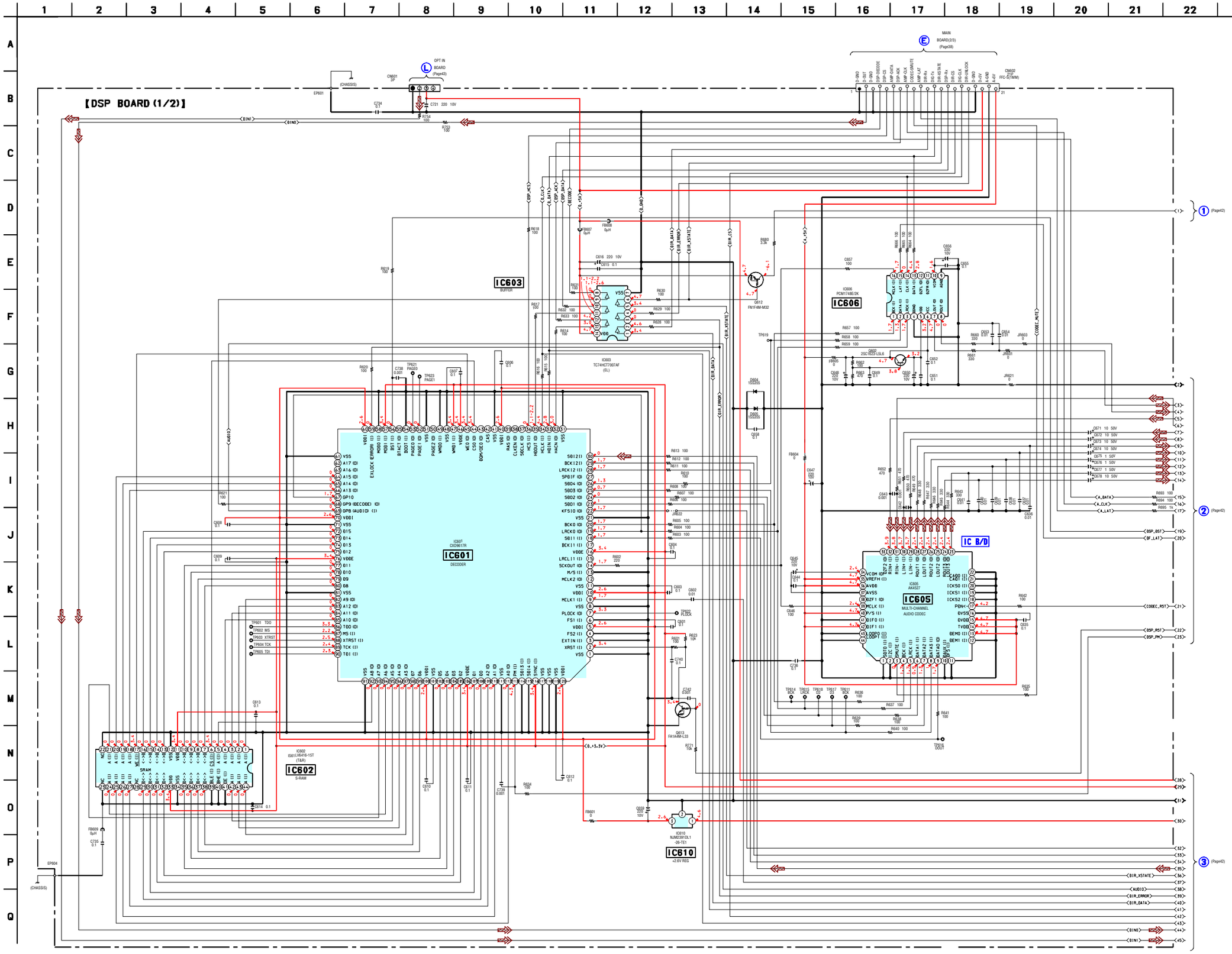

【DSP BOARD】(SIDE B)



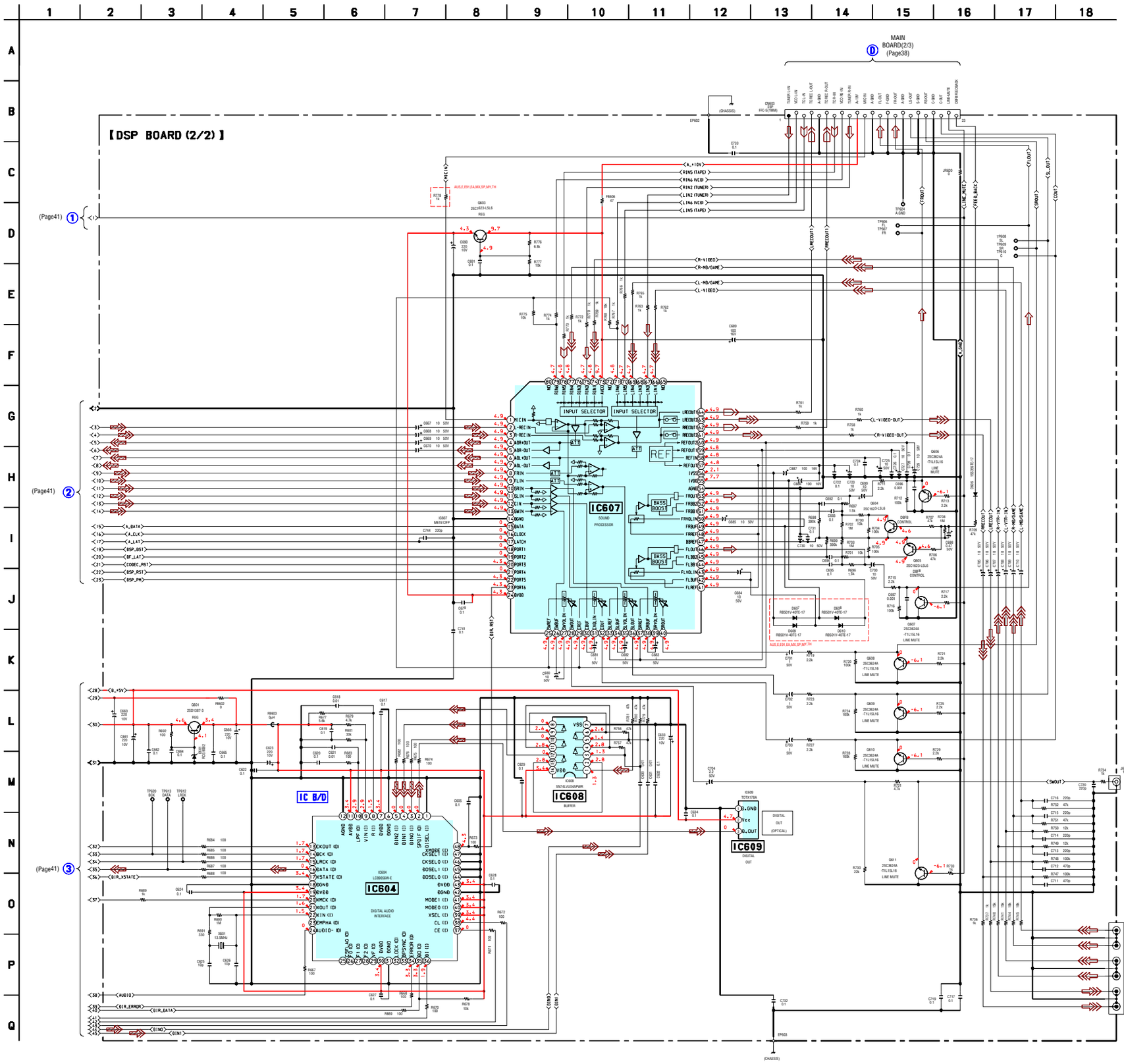

- **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D601 | F-8 |
| D604 | E-9 |
| D605 | E-9 |
| D606 | B-7 |
| D607 | D-4 |
| D608 | D-4 |
| D609 | D-4 |
| D610 | D-4 |
| IC601 | E-2 |
| IC602 | E-9 |
| IC603 | D-1 |
| IC604 | E-4 |
| IC605 | D-3 |
| IC606 | C-9 |
| IC607 | C-3 |
| IC608 | F-4 |
| IC609 | G-9 |
| IC610 | F-8 |
| Q601 | F-8 |
| Q602 | C-9 |
| Q603 | B-8 |
| Q604 | D-6 |
| Q605 | E-6 |
| Q606 | B-7 |
| Q607 | B-7 |
| Q608 | D-8 |
| Q609 | C-8 |
| Q610 | C-8 |
| Q611 | F-7 |
| Q612 | C-10 |
| Q613 | E-8 |

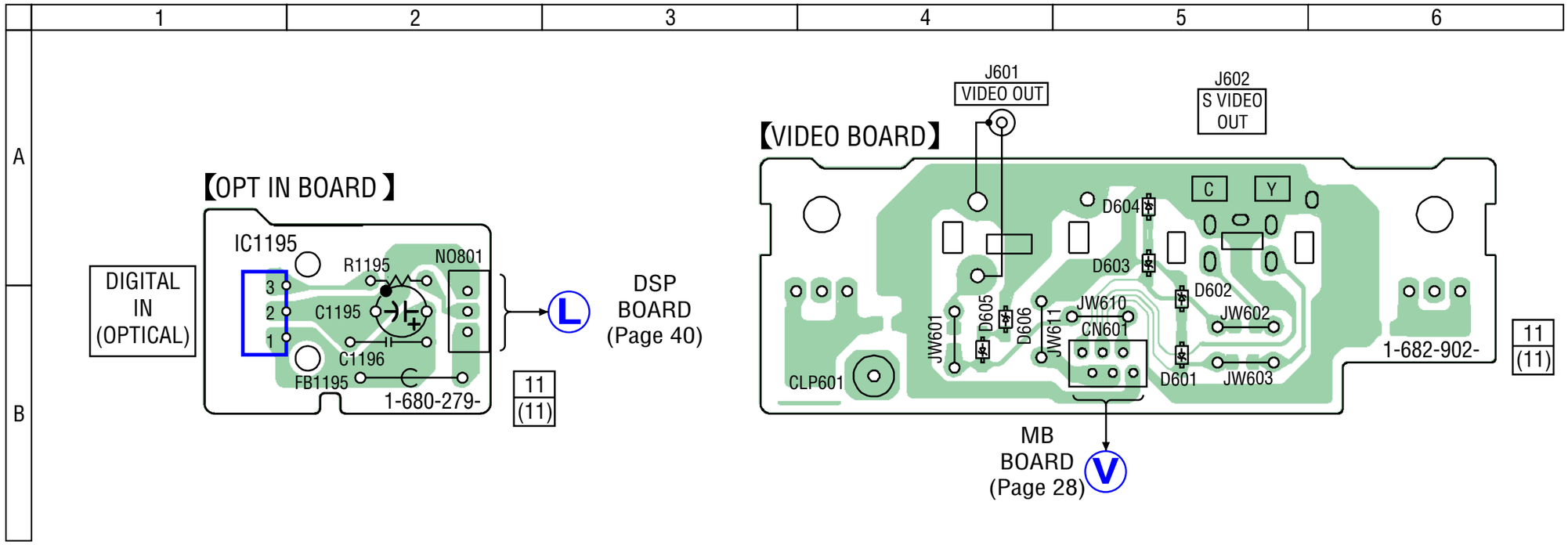
## 6-18. SCHEMATIC DIAGRAM – DSP (1/2) SECTION – • See page 59 for IC Pin Function. • See page 62 for IC Block Diagrams.



## 6-19. SCHEMATIC DIAGRAM – DSP (2/2) SECTION – • See page 63 for IC Block Diagrams.



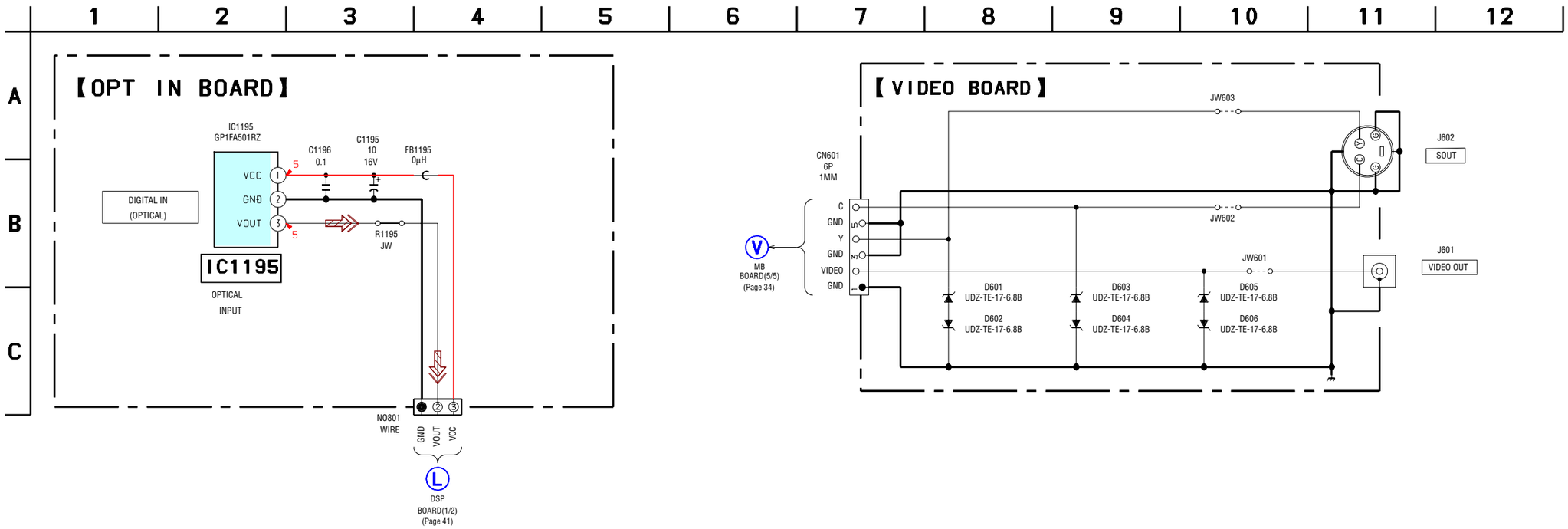
### 6-20. PRINTED WIRING BOARD – OPT SECTION – • See page 22 for Circuit Boards Location.



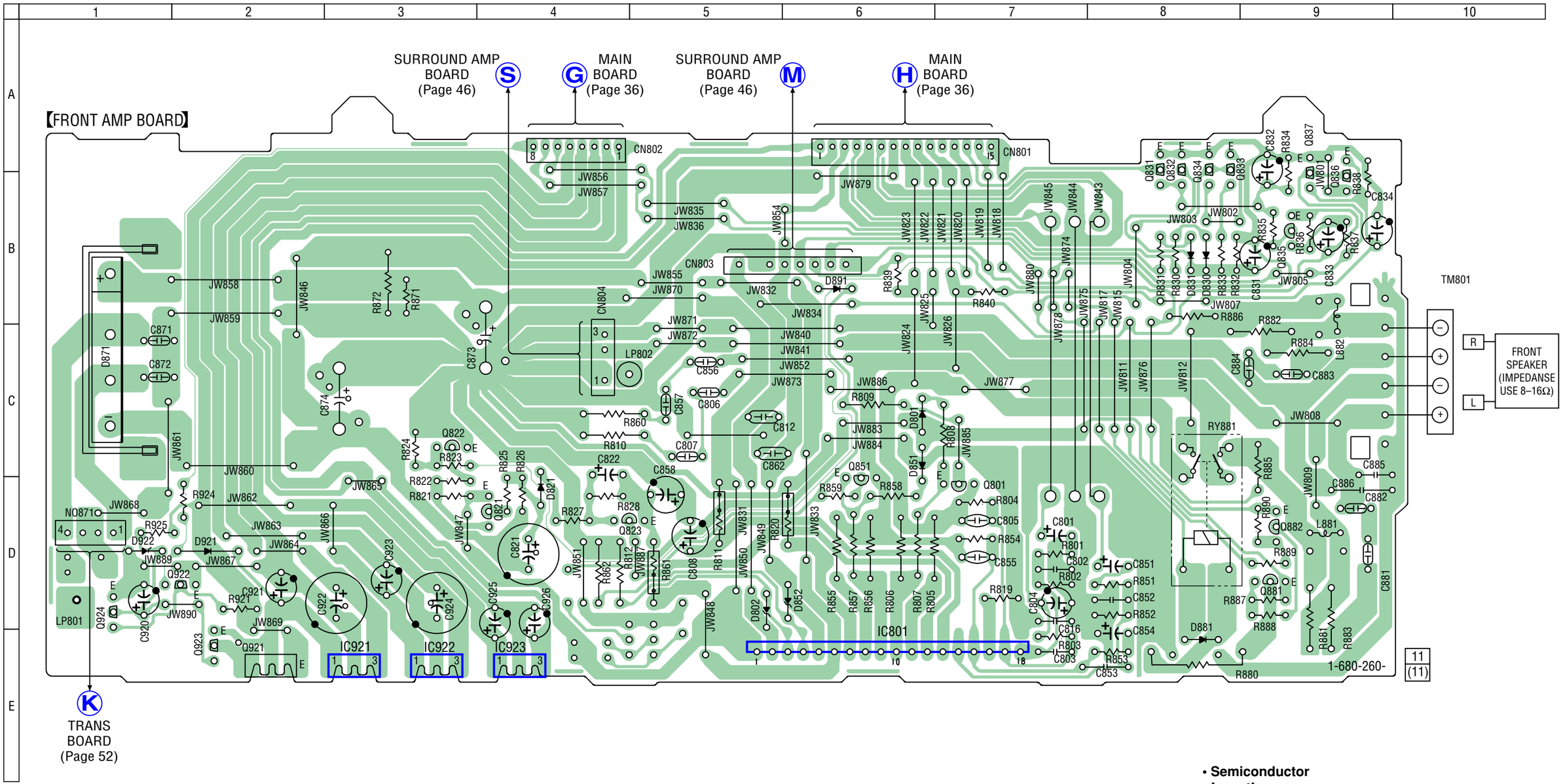

- **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D601 | B-5 |
| D602 | B-5 |
| D603 | A-5 |
| D604 | A-5 |
| D605 | B-4 |
| D606 | B-4 |
| IC1195 | B-1 |

### 6-21. SCHEMATIC DIAGRAM – OPT SECTION –



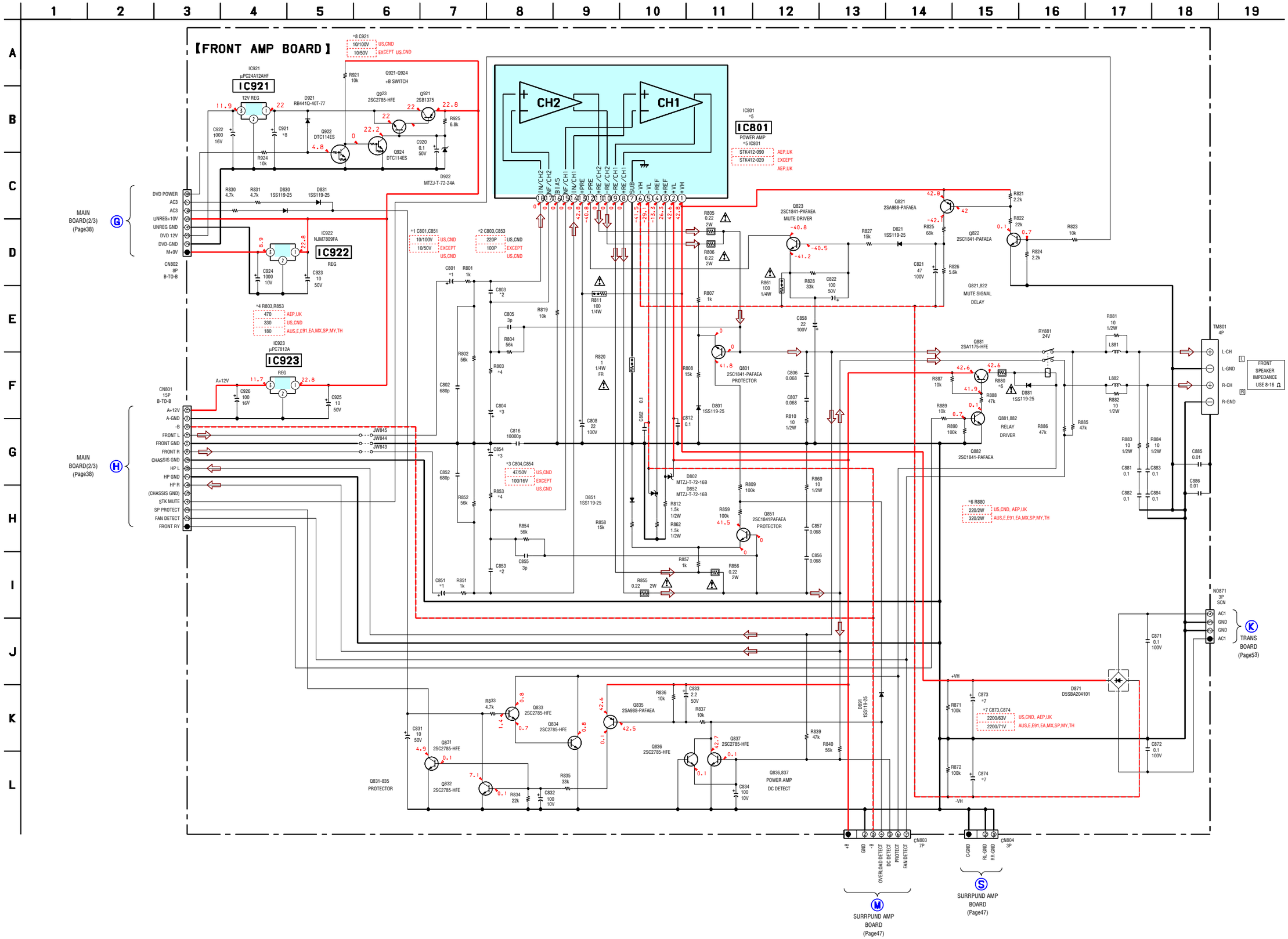
## 6-22. PRINTED WIRING BOARD – FRONT AMP SECTION – • See page 22 for Circuit Boards Location.



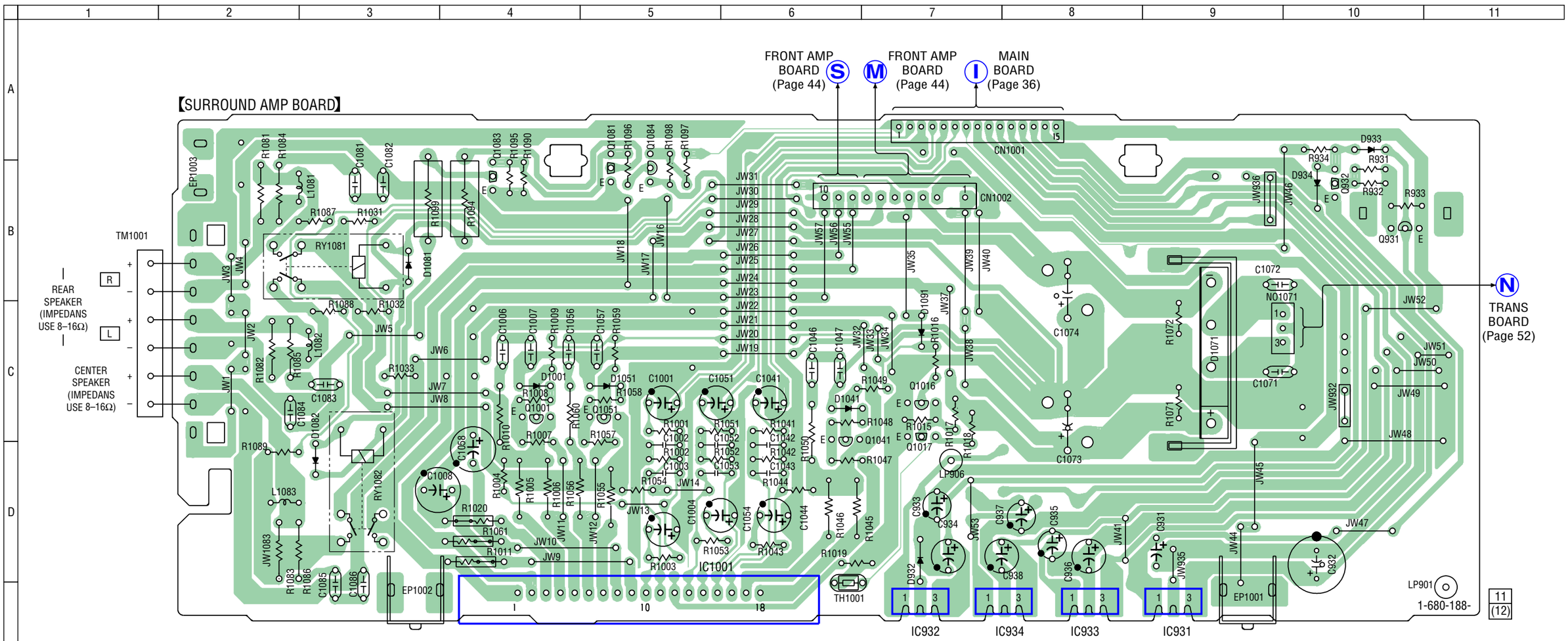

• **Semiconductor Location**

| Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|
| D801 | C-6 | Q801 | D-7 |
| D802 | D-5 | Q821 | D-4 |
| D821 | D-4 | Q822 | C-3 |
| D830 | B-8 | Q823 | D-4 |
| D831 | B-8 | Q831 | A-8 |
| D851 | C-6 | Q832 | A-8 |
| D852 | D-6 | Q833 | A-8 |
| D871 | C-1 | Q834 | A-8 |
| D881 | E-8 | Q835 | B-9 |
| D891 | B-6 | Q836 | B-9 |
| D921 | D-2 | Q837 | A-9 |
| D922 | D-1 | Q851 | C-6 |
| | | Q881 | D-9 |
| IC801 | E-6 | | |
| IC921 | E-3 | | |
| IC922 | E-3 | | |
| IC923 | E-4 | | |

## 6-23. SCHEMATIC DIAGRAM – FRONT AMP SECTION –



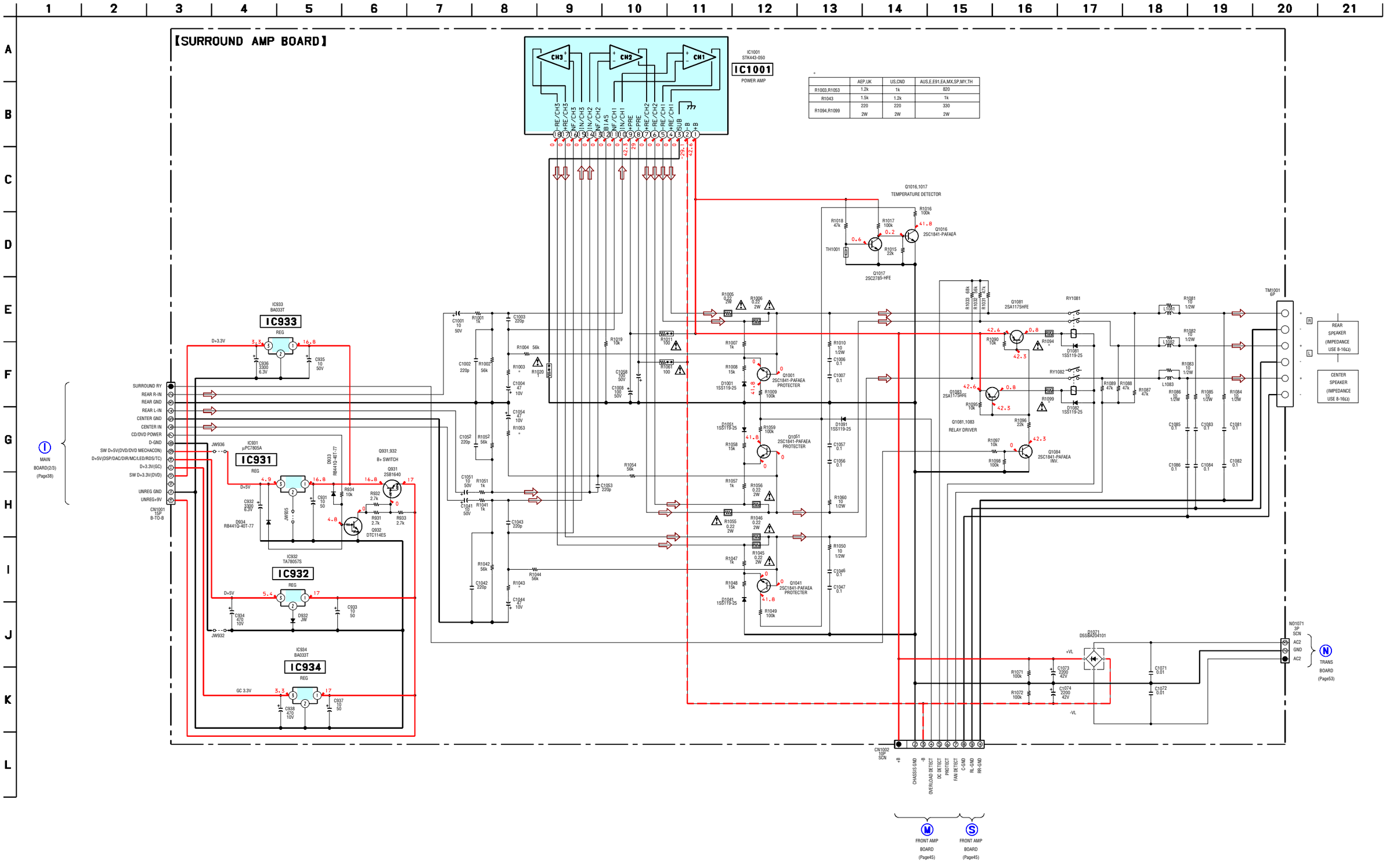
## 6-24. PRINTED WIRING BOARD – SURROUND AMP SECTION – • See page 22 for Circuit Boards Location.




• **Semiconductor Location**

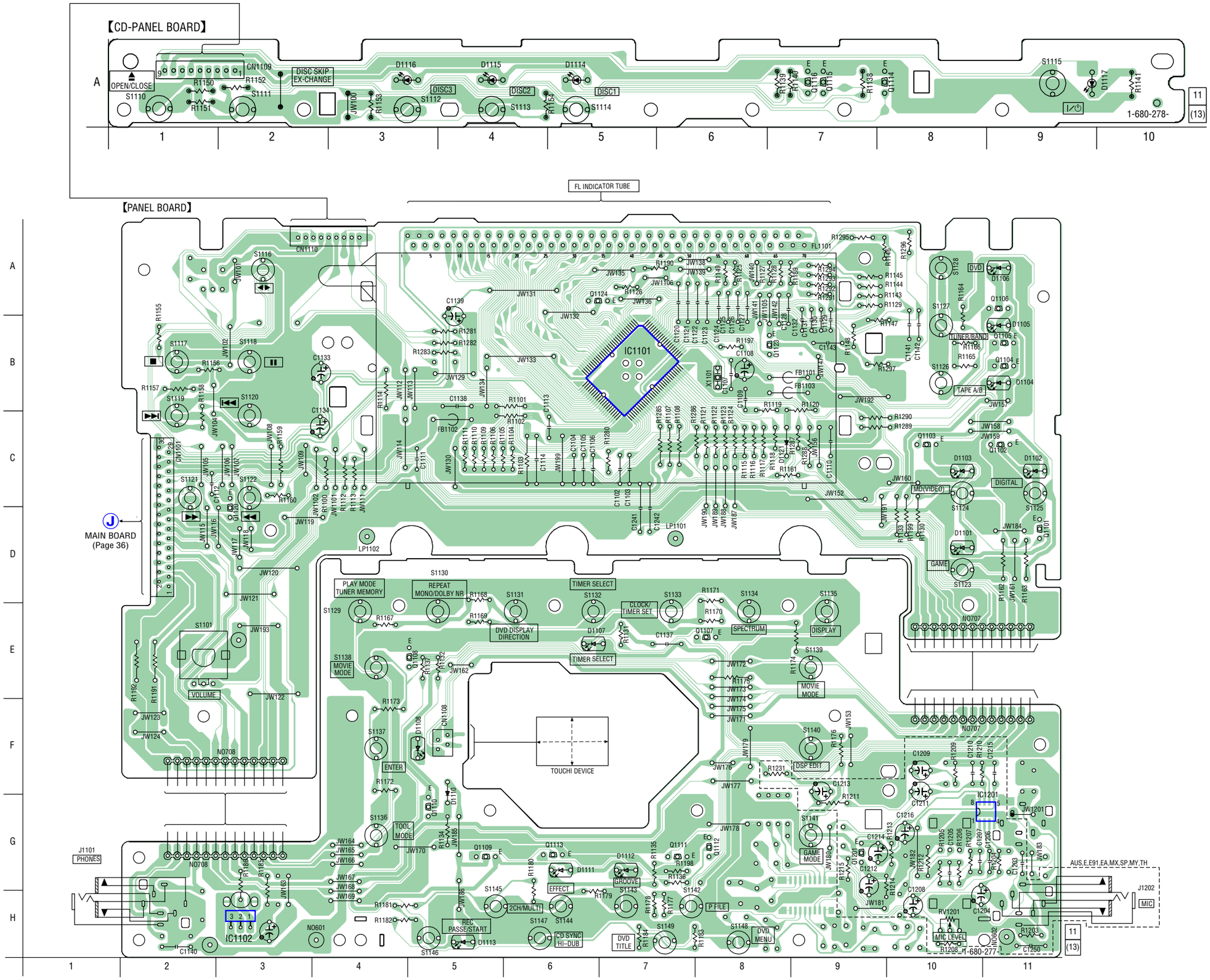
| Ref. No. | Location |
|---|---|
| D933 | A-10 |
| D934 | B-10 |
| D1001 | C-4 |
| D1041 | C-6 |
| D1051 | C-5 |
| D1071 | C-9 |
| D1081 | B-3 |
| D1082 | D-3 |
| D1091 | C-7 |
| | |
| IC931 | E-9 |
| IC932 | E-7 |
| IC933 | E-8 |
| IC934 | E-8 |
| IC1001 | E-5 |
| | |
| Q931 | B-10 |
| Q932 | B-10 |
| Q1001 | C-4 |
| Q1016 | C-7 |
| Q1017 | C-7 |
| Q1041 | C-6 |
| Q1051 | C-5 |
| Q1081 | B-5 |
| Q1083 | B-4 |
| Q1084 | B-5 |

## 6-25. SCHEMATIC DIAGRAM – SURROUND AMP SECTION –




| | AEP,UK | US,CND | AUS,E,E91,EA,MX,SP,MY,TH |
|---|---|---|---|
| R1003,R1053 | 1.2k | 1k | 820 |
| R1043 | 1.5k | 1.2k | 1k |
| R1094,R1099 | 220 2W | 220 2W | 330 2W |

## 6-26. PRINTED WIRING BOARD – PANEL SECTION – • See page 22 for Circuit Boards Location.



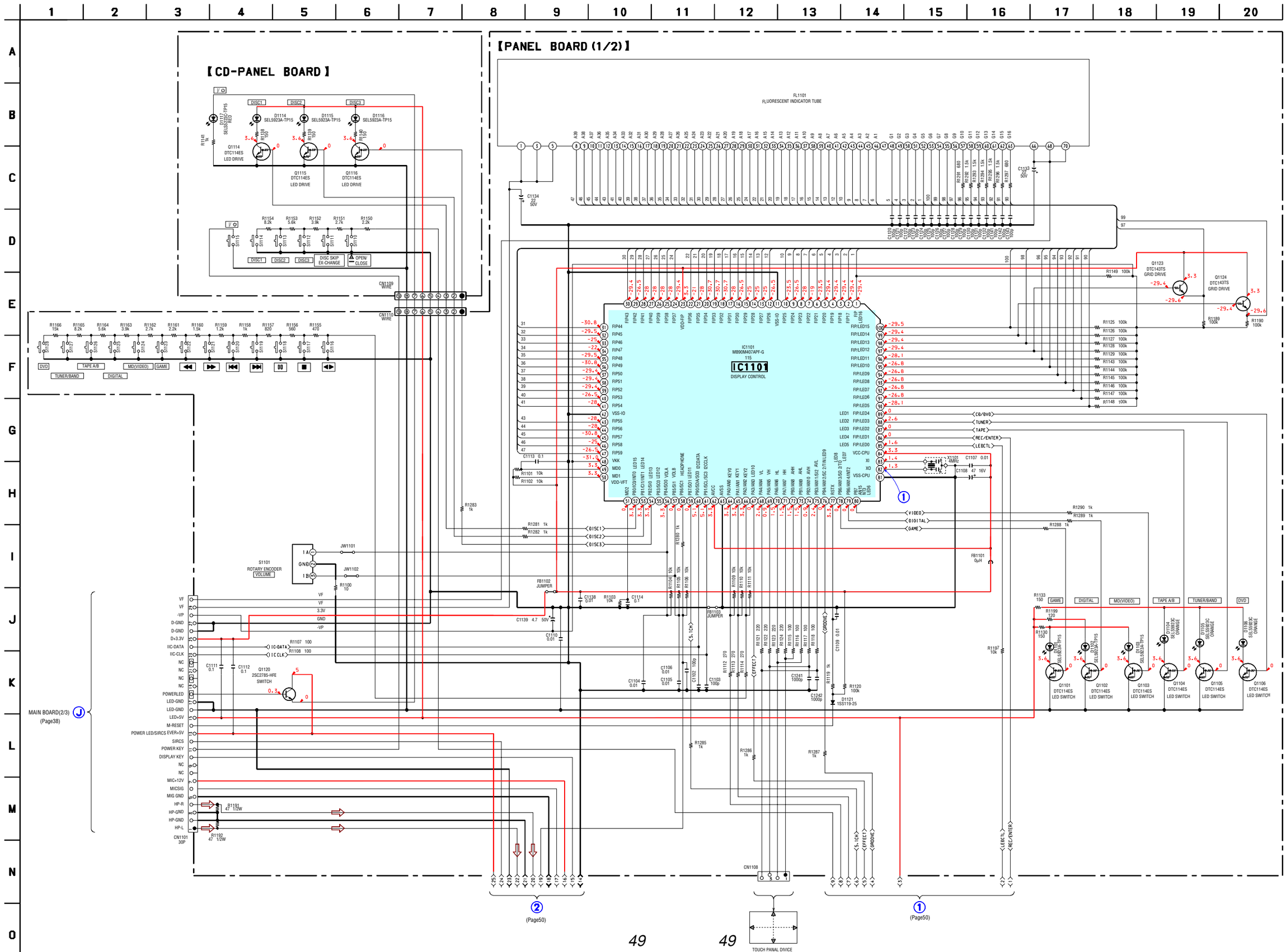

• **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D1114 | A-5 |
| D1115 | A-4 |
| D1116 | A-3 |
| D1117 | A-9 |
| Q1114 | A-8 |
| Q1115 | A-7 |
| Q1116 | A-7 |

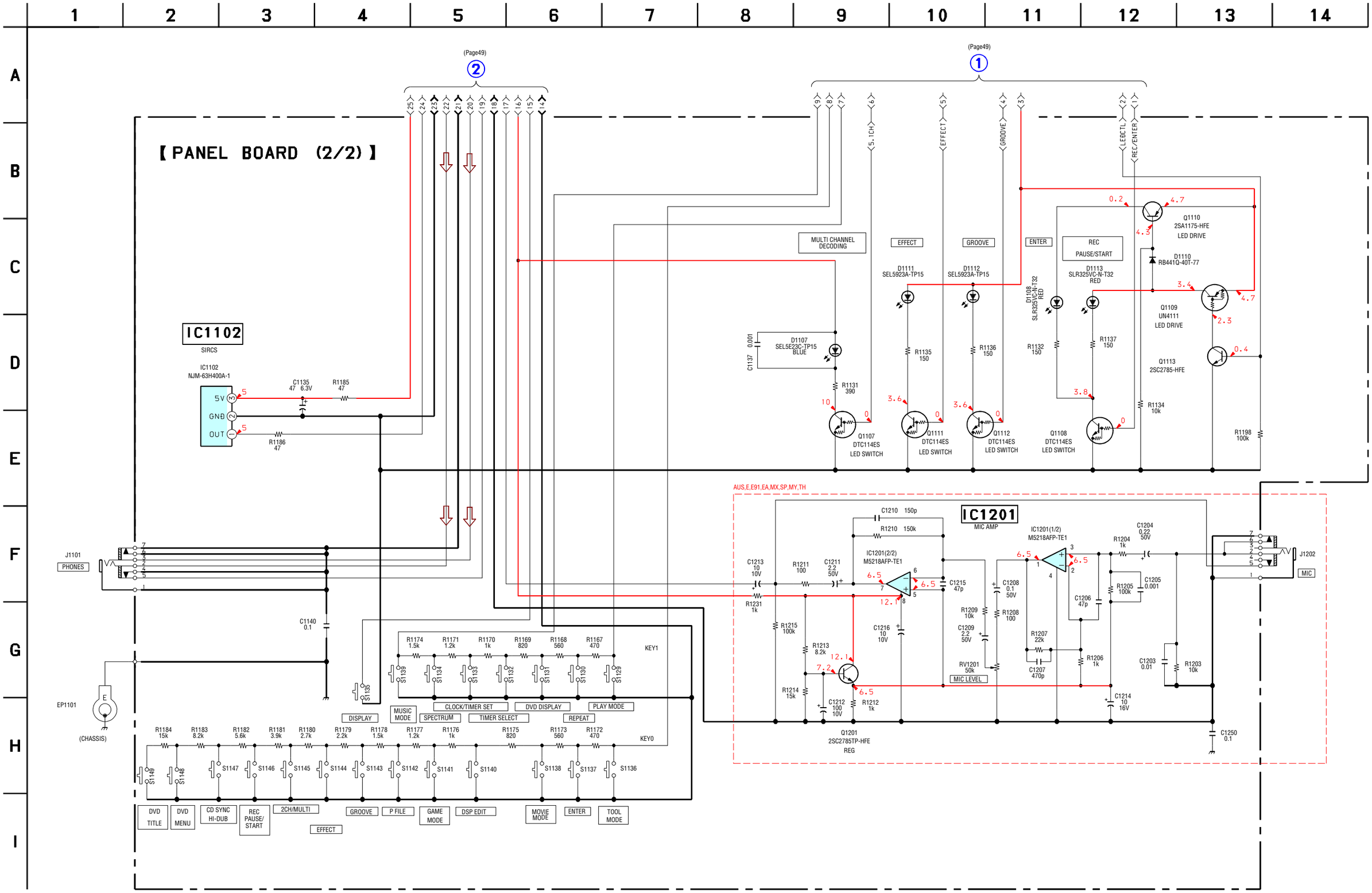
• **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D1101 | D-10 |
| D1102 | C-11 |
| D1103 | C-10 |
| D1104 | B-11 |
| D1105 | B-11 |
| D1106 | A-11 |
| D1107 | E-6 |
| D1108 | F-5 |
| D1110 | G-5 |
| D1111 | G-6 |
| D1112 | G-7 |
| D1113 | H-5 |
| D1121 | C-8 |
| IC1101 | B-7 |
| IC1102 | H-3 |
| IC1201 | G-11 |
| Q1101 | D-11 |
| Q1102 | C-11 |
| Q1103 | C-10 |
| Q1104 | B-11 |
| Q1105 | B-11 |
| Q1106 | A-11 |
| Q1107 | E-8 |
| Q1108 | E-5 |
| Q1109 | G-5 |
| Q1110 | G-5 |
| Q1111 | G-7 |
| Q1112 | G-8 |
| Q1113 | G-6 |
| Q1120 | D-3 |
| Q1123 | B-8 |
| Q1124 | A-6 |
| Q1201 | G-9 |

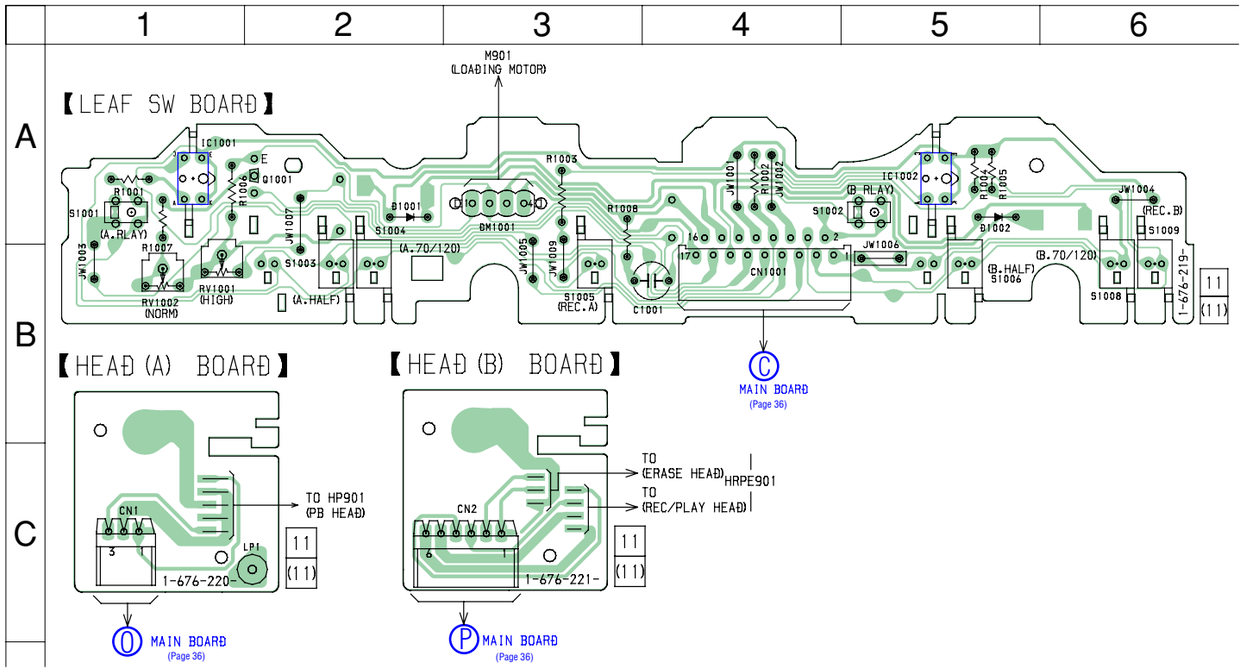
## 6-27. SCHEMATIC DIAGRAM – PANEL (1/2) SECTION – • See page 22 for Waveforms. • See page 58 for IC Pin Function.



## 6-28. SCHEMATIC DIAGRAM – PANEL (2/2) SECTION –



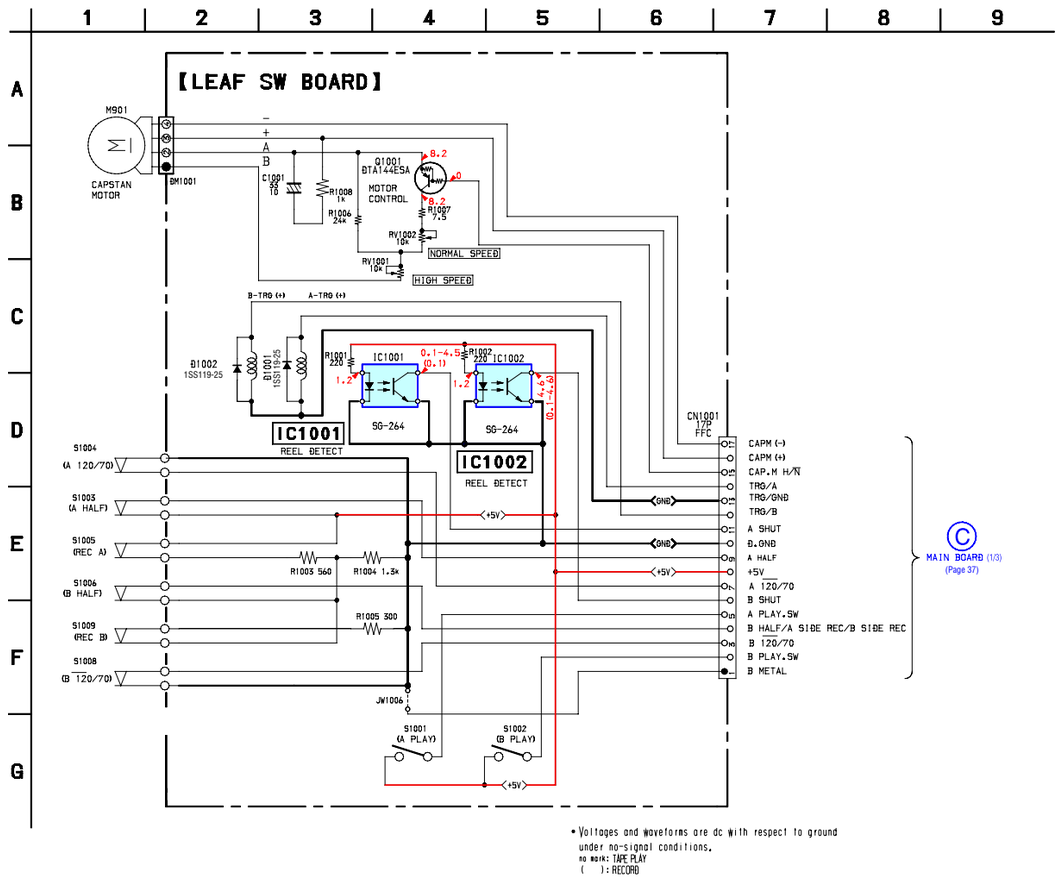
## 6-29. PRINTED WIRING BOARD – LEAF SW SECTION – • See page 22 for Circuit Boards Location.




• **Semiconductor Location**

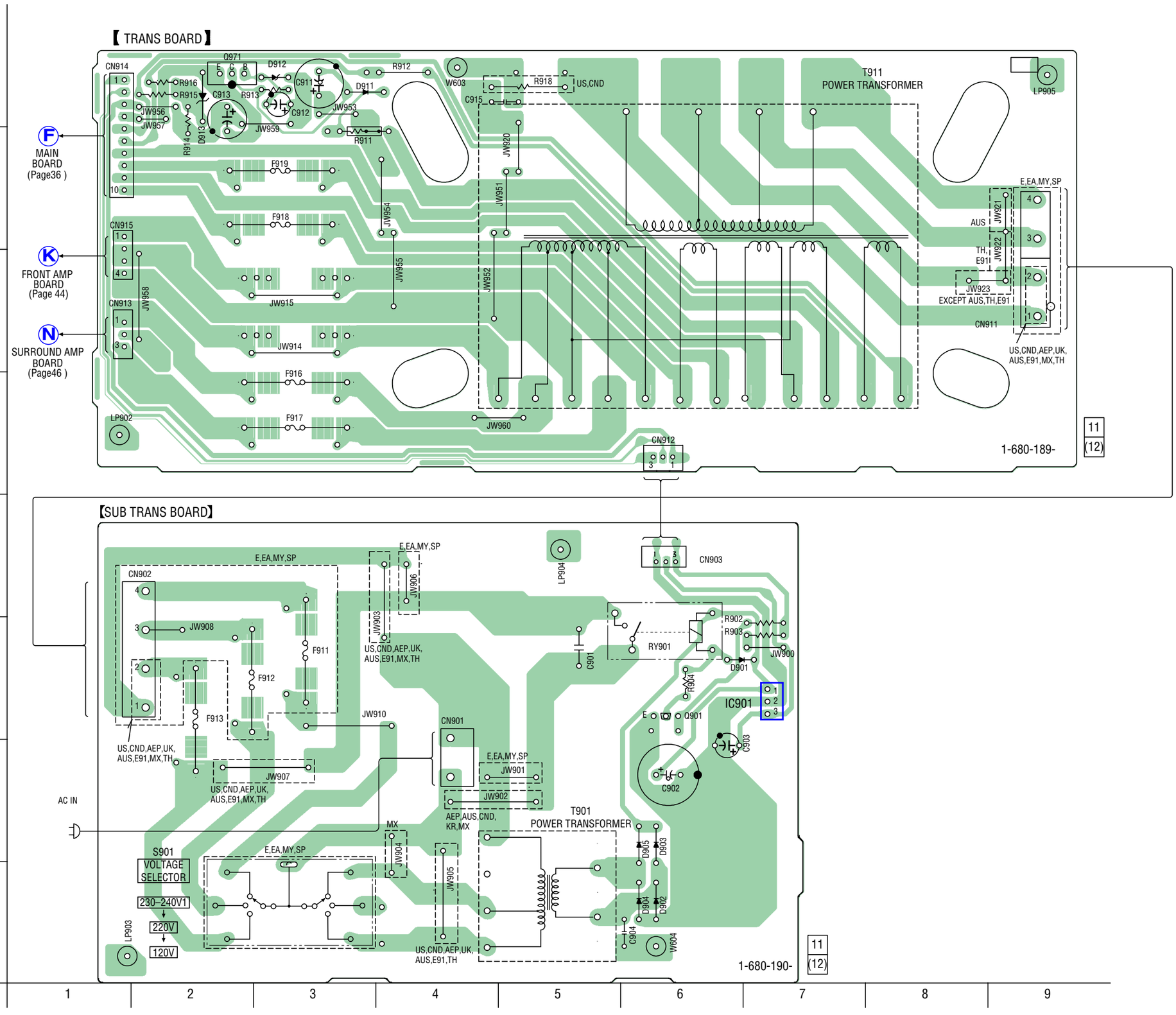
| Ref. No. | Location |
|---|---|
| D1001 | A-2 |
| D1002 | A-5 |
| IC1001 | A-1 |
| IC1002 | A-5 |
| Q1001 | A-2 |

## 6-30. SCHEMATIC DIAGRAM – LEAF SW SECTION –




• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark: TAPE PLAY
( ): RECORD

## 6-31. PRINTED WIRING BOARD – TRANS SECTION – • See page 22 for Circuit Boards Location.



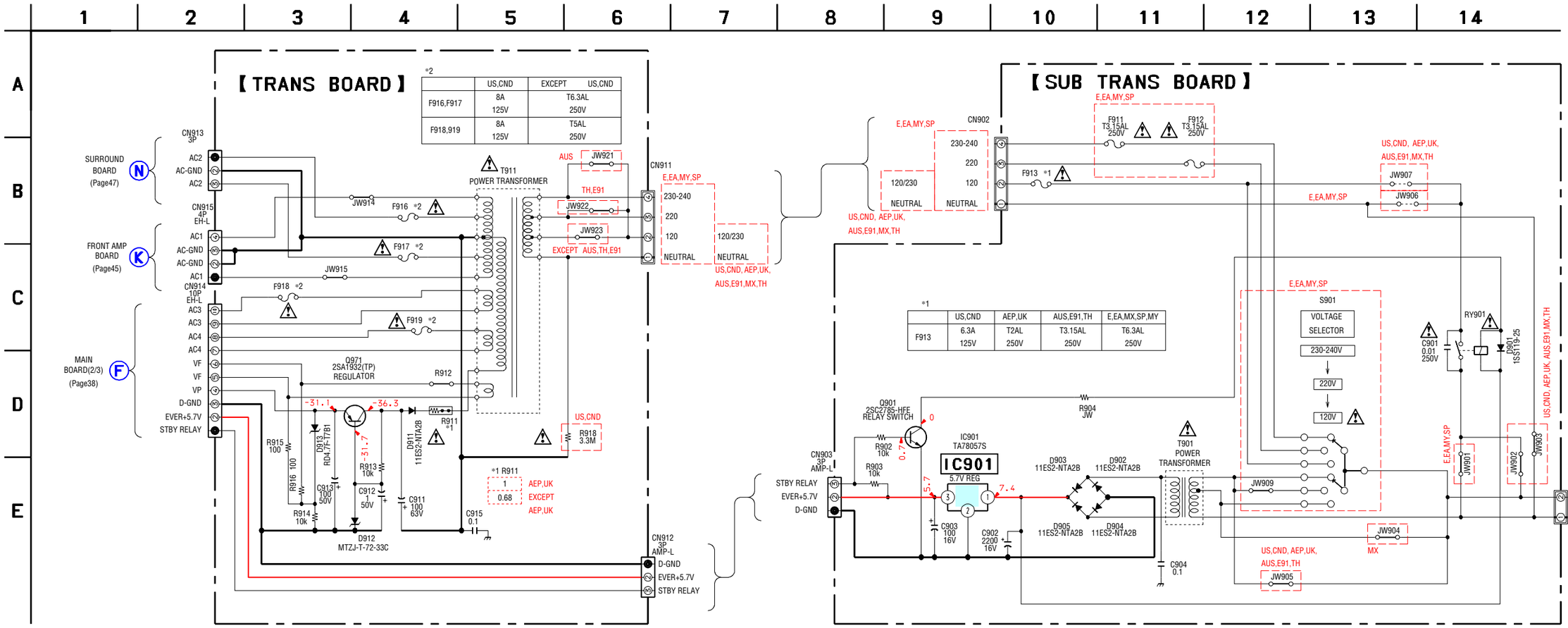

• **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D911 | A-3 |
| D912 | A-3 |
| D913 | A-2 |
| Q971 | A-2 |

• **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D901 | F-6 |
| D902 | H-6 |
| D903 | G-6 |
| D904 | H-6 |
| D905 | G-6 |
| IC901 | F-7 |
| Q901 | F-6 |

## 6-32. SCHEMATIC DIAGRAM – TRANS SECTION –




| *2 | US,CND | EXCEPT US,CND |
|---|---|---|
| F916,F917 | 8A 125V | T6.3AL 250V |
| F918,919 | 8A 125V | T5AL 250V |

| *1 | US,CND | AEP,UK | AUS,E91,TH | E,EA,MX,SP,MY |
|---|---|---|---|---|
| F913 | 6.3A 125V | T2AL 250V | T3.15AL 250V | T6.3AL 250V |

## 6-33. IC PIN FUNCTION DESCRIPTION

• **IC103 MB91307APFV-G-BND-E1 DVD SYSTEM CONTROL (MB BOARD (4/5))**

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | HA17 | O | Address bus to SRAM |
| 2 | HA18 | O | Address bus to SRAM |
| 3 | HA19 | O | Address bus to SRAM |
| 4 | HA20 | O | Address bus to SRAM |
| 5 | HA21 | O | Address bus to SRAM |
| 6 | HA22 | O | Address bus to SRAM (Not used) |
| 7 | WP | O | Chip select signal output to EEPROM |
| 8 | TRM/XKRCS | O | Not used (open) |
| 9 | AVCC | I | Power supply +3.3V |
| 10 | AVRH | I | A/D reference voltage input (Connected to AVCC) |
| 11 | AVSS | — | Ground |
| 12 | AN0 | I | A/D input pin (mode set) |
| 13 | AN1 | I | A/D input pin (mode set) |
| 14 | AN2 | I | A/D input pin (mode set) |
| 15 | AN3 | I | A/D input pin (mode set) |
| 16 | INT0 | I | HIREQO signal input from CXD1933Q |
| 17 | INT1 | I | XINT signal input from CXD9635R |
| 18 | INT2 | I | HINT signal input from CXD9635R |
| 19 | INT3 | I | FGAINT signal input from LC22004A |
| 20 | INT4 | I | XIFINT signal input from M30622MGA |
| 21 | INT5 | I | Not used (open) |
| 22 | INT6 | I | Not used (open) |
| 23 | INT7 | I | Not used (open) |
| 24 | VCC | I | Power supply +3.3V |
| 25 | SI0 | I | Serial data input from M30622MGA |
| 26 | SO0 | O | Serial data output to M30622MGA |
| 27 | SC0 | O | Clock output to M30622MGA |
| 28 | SI1 | I | Not used (open) |
| 29 | SO1 | O | Not used (open) |
| 30 | SC1 | O | Not used (open) |
| 31 | SI2 | I | Test serial data input |
| 32 | SO2 | O | Test serial data output |
| 33 | DSENS | O | Not used (open) |
| 34 | VSS | — | Ground |
| 35 | XRST | O | Reset signal output |
| 36 | XARPRST | O | XARP reset signal output to CXD9635R |
| 37 | RGBSEL/MICMUTE | O | Not used (open) |
| 38 | SDA | I/O | Serial data input/output to EEPROM |
| 39 | SCL | O | Serial clock output to EEPROM |
| 40 | TRM+XKRRST | O | Not used (open) |
| 41 | EUROV/V/CLAPSW1 | O | Not used (open) |
| 42 | DISCEXT/CLPSW0 | O | Not used (open) |
| 43 | MD0 | I | Mode signal input (connected to VCC) |
| 44 | MD1 | I | Mode signal input (connected to VSS) |
| 45 | MD2 | I | Mode signal input (connected to VSS) |
| 46 | DREQ0 | I | DMA external transfer request input |
| 47 | DACK0 | O | DMA external transfer request acknowledge output |
| 48 | XDRVMUTE | O | Mute signal output to FAN8034 |
| 49 | DREQ1 | I | DMA external transfer request input |
| 50 | DACK1 | O | DMA external transfer request acknowledge output |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 51 | XIFCS | O | XIFCS signal output to M30622MGA |
| 52 | VSS | — | Ground |
| 53 | X1 | I | External crystal terminal (16.5MHz) |
| 54 | X0 | O | External crystal terminal (16.5MHz) |
| 55 | VCC | I | Power supply +3.3V |
| 56 | CKSW1 | I | Not used (connected toVCC) |
| 57 | OCSW1 | I | Not used (connected toVCC) |
| 58 | CS0X | O | Chip select signal output to FLASH RAM |
| 59 | CS1X | O | Not used (open) |
| 60 | CS2X | O | AVDCS2 signal output to CXD1933Q |
| 61 | CS3X | O | AVDCS3 signal output to CXD1933Q |
| 62 | CS4X | O | XARPCS signal output to CXD1933Q |
| 63 | CS5X | O | XSPDCS signal output to CXD1933Q |
| 64 | C | — | External capacitor terminal |
| 65 | CS6X | O | XFAGCS signal output to CXD1933Q |
| 66 | CS7X | O | Not used (open) |
| 67 | XWAIT | I | XWAIT signal input from CXD1933Q |
| 68 | BGRNTX | I | Not used (connected toVCC) |
| 69 | BGR | O | Not used (open) |
| 70 | XRD | O | Out enable signal output to FLASH RAM |
| 71 | XWRH | O | Write signal output to FLASH RAM |
| 72 | XWRL | O | Not used (open) |
| 73 | XMIX | I | Not used (connected toVCC) |
| 74 | HSTX | I | Not used (connected toVCC) |
| 75 | VSS | — | Ground |
| 76 | XFRRST | I | System reset input from M30622MGA |
| 77 | CPUCK | O | Clock signal output to LC22004A |
| 78 | OCSW2 | I | Not used (connected toVCC) |
| 79 | XBACK | I | Not used (connected toVCC) |
| 80 | VESCS/X39CS | I | Not used (connected toVCC) |
| 81 | 48/44.1K | O | Audio clock control signal output |
| 82 | WIDE | O | WIDE control signal output |
| 83 | MAMUTE | I | System OK signal input to M30622MGA |
| 84 | XLDON | O | Laser diode ON signal output |
| 85 | HD0 | I/O | Data input/output to SRAM |
| 86 | HD1 | I/O | Data input/output to SRAM |
| 87 | HD2 | I/O | Data input/output to SRAM |
| 88 | HD3 | I/O | Data input/output to SRAM |
| 89 | HD4 | I/O | Data input/output to SRAM |
| 90 | HD5 | I/O | Data iniput/output to SRAM |
| 91 | HD6 | I/O | Data input/output to SRAM |
| 92 | HD7 | I/O | Data input/output to SRAM |
| 93 | HD8 | I/O | Data input/output to SRAM |
| 94 | HD9 | I/O | Data input/output to SRAM |
| 95 | HD10 | I/O | Data input/output to SRAM |
| 96 | HD11 | I/O | Data input/output to SRAM |
| 97 | HD12 | I/O | Data input/output to SRAM |
| 98 | HD13 | I/O | Data input/output to SRAM |
| 99 | HD14 | I/O | Data input/output to SRAM |
| 100 | HD15 | I/O | Data input/output to SRAM |


54

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 101 | VSS | — | Ground |
| 102 | HA0 | O | Address bus to SRAM |
| 103 | HA1 | O | Address bus to SRAM |
| 104 | HA2 | O | Address bus to SRAM |
| 105 | HA3 | O | Address bus to SRAM |
| 106 | HA4 | O | Address bus to SRAM |
| 107 | HA5 | O | Address bus to SRAM |
| 108 | HA6 | O | Address bus to SRAM |
| 109 | HA7 | O | Address bus to SRAM |
| 110 | VCC | I | Power supply +3.3V |
| 111 | HA8 | O | Address bus to SRAM |
| 112 | HA9 | O | Address bus to SRAM |
| 113 | HA10 | O | Address bus to SRAM |
| 114 | HA11 | O | Address bus to SRAM |
| 115 | HA12 | O | Address bus to SRAM |
| 116 | HA13 | O | Address bus to SRAM |
| 117 | HA14 | O | Address bus to SRAM |
| 118 | HA15 | O | Address bus to SRAM |
| 119 | VSS | — | Ground |
| 120 | HA16 | O | Address bus to SRAM |

• **IC401 MASTER CONTROL (M30622MGA-A72FP) (MAIN Board (2/3))**

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | AMP-DATA | O | Amp data signal output |
| 2 | AMP-CLK | O | Amp clock signal output |
| 3 | AMP-LAT | O | Amp latch signal output |
| 4 | SIRCS | I | Remote commander signal input |
| 5 | DIG-Tx | O | Digital common Tx signal output |
| 6 | DSP-Rx | I | DSP Rx signal input |
| 7 | DIG-CLK | O | Digital common clock signal output |
| 8 | GND | — | Ground |
| 9 | GND | — | Ground |
| 10 | XC-IN | I | Sub clock input (32.768kHz) |
| 11 | XC-OUT | O | Sub clock output (32.768kHz) |
| 12 | RESET | I | System reset signal input |
| 13 | X-OUT | O | Main system clock output (16MHz) |
| 14 | VSS | — | Ground |
| 15 | X-IN | I | Main system clock input (16MHz) |
| 16 | VCC | I | Power supply (EVER+5V) |
| 17 | NMI | I | Not used (PULL UP EVER +5V) |
| 18 | RDS-INT | I | RDS interrupt signal input |
| 19 | SYSCS | I | System CS signal input to DVD |
| 20 | RDS-DATA | I | RDS data signal input |
| 21 | ST-MUTE | O | Tuner mute signal output |
| 22 | ST-CE | O | Tuner chip enable output |
| 23 | ST-DOUT | O | Tuner data output |
| 24 | BU PWM 3 | O | Not used |
| 25 | ST-DIN | I | Tuner data input |
| 26 | BU PWM 2 | O | Not used |
| 27 | ST-CLK | O | Tuner clock signal output |
| 28 | BU PWM 1 | O | Not used |
| 29 | IIC_ CLK | O | IIC data bus reading clock (SCL signal) |
| 30 | IIC_ DATA | O | IIC data bus SDA signal |
| 31 | CANT USE | I | Not used |
| 32 | SQ-DATA-IN | I | CD data signal input (Not used) |
| 33 | SQ-CLK | O | CD data clock signal output (Not used) |
| 34 | SENS | I | BD Condition signal input (Not used) |
| 35 | SYS OUT | O | System data output to DVD |
| 36 | SYS IN | I | System data input from DVD |
| 37 | SYS CLK | O | System clock output to DVD |
| 38 | DVD-POWER | O | DVD power on/off switch signal output |
| 39 | STB LED | O | Stanby led /clock signals check point |
| 40 | SYS RST | O | System reset signal output to DVD |
| 41 | M-RESET | O | Master system reset signal output |
| 42 | SYSRQ | O | System REQ signal output to DVD |
| 43 | SYS OK | O | System OK signal output to DVD |
| 44 | LOAD-IN | O | Not used |
| 45 | LOAD-OUT | O | Not used |
| 46 | OPEN | O | Not used |
| 47 | FR | I | Not used |
| 48 | V MUTE | O | Video mute signal output |
| 49 | T-SENS | I | Not used |
| 50 | A TRG | O | A deck trigger control signal output |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 51 | NO-USE | I | Not used |
| 52 | B TRG | O | B deck trigger control signal output |
| 53 | AMS-IN | I | AMS signal input |
| 54 | CAPM-H/L | O | Capstan moter highi/low speed control signal output |
| 55 | CAPM-CNT 1 | O | Capstan moter REV/FWD/STOP control signal output |
| 56 | A PLAY | I | A deck play detect signal input |
| 57 | B PLAY | I | B deck play detect signal input |
| 58 | TC-MUTE | O | Tape deck line mute switch signal output. mute: “H” |
| 59 | R/PB/PAS | I | REC/PB/PASS select signal input |
| 60 | NR-ON/OFF | O | DOLBY NR on/off switch signal output |
| 61 | $\overline{\text{REC-MUTE}}$ | O | REC mute switch signal output (mute “L”) |
| 62 | VCC | I | Power supply(+5V) |
| 63 | SOFT-TEST | O | Soft out check point |
| 64 | VSS | — | Ground |
| 65 | BIAS | O | BIAS on/off switch signal output. |
| 66 | EQ-H/N | O | EQ high/low switch serect signal output |
| 67 | PB-A/B | O | A/B playback deck select signal output (deck A: “L”, deck B “H”) |
| 68 | $\overline{\text{ALC}}$ | O | ALC switch signal output (on: “L”, off “H”) |
| 69 | TC-RELAY | O | Tape deck relay switch signal output |
| 70 | A HALF | I | A deck half detect signal input |
| 71 | LINE-MUTE | O | Line mute signal output (on “H”, off “L”) |
| 72 | STK-POWER | O | Power amplifier on/off signal output (on “H”, off “L”) |
| 73 | DISPLAY KEY | I | Display key on/off switch signal input |
| 74 | POWER KEY | I | Power key on/off switch signal input |
| 75 | DIR-UNLOCK | I | Dir pll unlock signal input (analog: “H”, DVD/Din normal: “L”) |
| 76 | DIR-CS | O | Dir cs signal output (normal “H”) |
| 77 | DIR-XSTATE | I | Dir xstate signal input (normal “H”) |
| 78 | DIR-Rx | I | Dir tx signal input |
| 79 | CODEC-SMUTE | I | Codec soft mute signal input (normal “L”, mute “H”) |
| 80 | DSP-ACK | I | DSP ACK signal input |
| 81 | DSP-CS | I | DSP CS signal input |
| 82 | DSP-DECODE | I | DSP DECODE signal input (AC-3 DTS decode “H”) |
| 83 | STBY-RELAY | O | Main power on/off switch signal output |
| 84 | FRONT-RELAY | O | Front speaker relay switch signal output |
| 85 | REAR-RELAY | O | Not used (rear speaker relay) |
| 86 | SP PROTECT | I | Front speaker protect signal input ( on “L”) |
| 87 | STEREO | I | FM stereo detection signal input (stereo “L”) |
| 88 | TUNED | I | Tuning detection signal input (tuned “L”) |
| 89 | A SHUT | I | Shut off detection signal input (A deck reel pulse) |
| 90 | B SHUT | I | Shut off detection signal input (B deck reel pulse) |
| 91 | B-HALF | I | Detection input from the B deck half signal input |
| 92 | MODEL-IN | I | Destination setting terminal |
| 93 | SPEC-IN | I | Destination settnng terminal |
| 94 | FAN | O | Fan on control signal output |
| 95 | PWECK | I | Power check input |
| 96 | AVSS | — | Ground |
| 97 | POWER | O | Standby LED on/off control signal output |
| 98 | VREF | I | Reference voltage(+5V) |
| 99 | AVCC | I | Power supply (+5V) |
| 100 | AC-CUT | I | AC cut on/off check signal input |

• **IC1101 DISPLAY CONTROL (MB90M407APF-G-115-BND) (PANEL Board (1/2))**

| Pin No. | Pin Name | I/O | Discription |
|---|---|---|---|
| 1 | FIP/LED16 | O | Grid drive signal output to the fluorescent indicator |
| 2 to 5 | FIP17 - 20 | O | Grid drive signal output to the fluorescent indicator |
| 6 to 10 | FIP21-25 | O | Segment drive signal output the flourescent indicator tube |
| 11 | VSS IO | — | Ground |
| 12 to 22 | FIP26-36 | O | Segment drive signal output the flourescent indicator tube |
| 23 | VDD FIP | I | Power supply terminal (B+ VFT) |
| 24 to 41 | FIP37-54 | O | Segment drive signal output the flourescent indicator tube |
| 42 | VSS IO | — | Ground |
| 43 to 47 | FIP35-59 | O | Segment drive signal output the flourescent indicator tube |
| 48 | VKK | I | Power supply terminal (B- for VFT) |
| 49 | MD0 | I | Chip Mode Select 0 |
| 50 | MD1 VDD-VFT | I | Chip Mode Select 1 |
| 51 | MD2 | I | Chip Mode Select 2 |
| 52 | LED15 | O | LED switch signal output |
| 53 | LED14 | O | LED switch signal output |
| 54 | LED13 | O | LED switch signal output |
| 55 | LED12 | O | LED switch signal output |
| 56 | VOL A | I | Jog dial pulse input from the rotary encoder(A phase input) |
| 57 | VOL B | I | Jog dial pulse input from the rotary encoder(B phase input) |
| 58 | HEADPHONE | I | HEAD PHONE check (“H” head phone) |
| 59 | LED11 | O | LED switch signal output |
| 60 | I2C DATE | O | IIC data bus SDA signal |
| 61 | I2C CLA | O | IIC data bus reading clock signal |
| 62 | AVCC | I | Power supply terminal (analog) |
| 63 | AVSS | — | Ground (analog) |
| 64 to 66 | KEY0 - KEY2 | I | KEY in terminal (A/D input) |
| 67 | LED10 | O | LED switch signal output |
| 68 | VL | I/O | Touch pad control signal input/output |
| 69 | VH | I/O | Touch pad control signal input/output |
| 70 | HL | I/O | Touch pad control signal input/output |
| 71 | HH | I/O | Touch pad control signal input/output |
| 72 | AHH | I | Touch pad signal input(A/D input) |
| 73 | AHL | I | Touch pad signal input(A/D input) |
| 74 | AVH | I | Touch pad signal input(A/D input) |
| 75 | AVL | I | Touch pad signal input(A/D input) |
| 76 | LED9 | O | LED switch signal output |
| 77 | RSTX | I | System reset signal input |
| 78 | LED8 | O | LED switch signal output |
| 79 | LED7 | O | LED switch signal output |
| 80 | LED6 | O | LED switch signal output |
| 81 | VSS CPU | — | Ground |
| 82 | XO | O | Clock output (4MHz) |
| 83 | XI | I | Clock input (4MHz) |
| 84 | VCC - CPU | I | Power supply terminal |
| 85 | LED5 | O | LED switch signal output |
| 86 | LED4 | O | LED switch signal output |
| 87 | LED3 | O | LED switch signal output |
| 88 | LED2 | O | LED switch signal output |
| 89 | LED1 | O | LED switch signal output |
| 90 to 100 | FIP LED5 - 15 | O | Grid drive signal output to the fluorescent indicator |

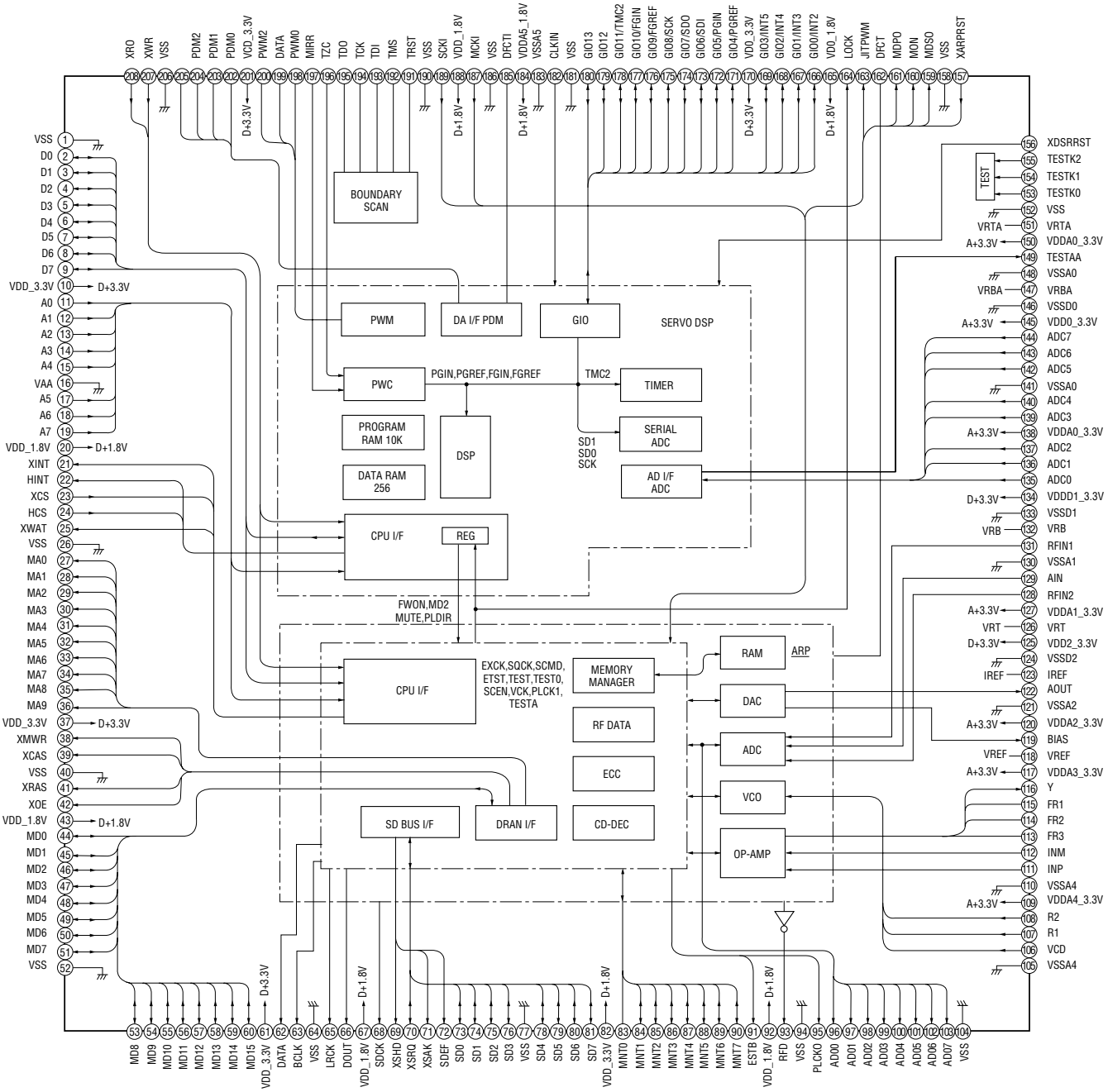
**• IC601 DECODER (CXD9617R) (DSP Board (1/2))**

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | VSS | — | Ground |
| 2 | XRST | I | Reset signal input |
| 3 | EXTIN | — | GND |
| 4 | FS2 | I | Sampling frequency switching signal input (Not used) |
| 5 | VDDI | I | Power supply |
| 6 | FS1 | I | Sampling frequency switching signal input (Not used) |
| 7 | PLOCK | O | Internal PLL lock signal output (Not used) |
| 8 | VSS | — | Ground |
| 9 | MCLK1 | I | Clock signal input (135 MHz) |
| 10 | VDDI | I | Power supply |
| 11 | VSS | — | Ground |
| 12 | MCLK2 | O | Clock signal output |
| 13 | M/S | I | Switching of master/slave operation (Not used) |
| 14 | SCKOUT | O | Internal system clock signal output |
| 15 | LRCKI1 | I/O | Sampling clock input/output for audio IF serial data (Not used) |
| 16 | VDDE | — | Power supply |
| 17 | BCKI1 | I/O | Bit clock input/output terminal for audio IF serial data (Not used) |
| 18 | SDI1 | I | Audio IF data input |
| 19 | LRCKO | O | Sampling clock output for audio IF serial data |
| 20 | BCKO | O | Bit clock output terminal for audio IF serial data |
| 21 | VSS | — | Ground |
| 22 | KFSIO | I/O | Audio clock signal (364fs/256fs) input/output |
| 23 to 26 | SDO1 - SDO4 | O | Audio IF serial data output |
| 27 | SPDIF | O | S/D IF output (Not used) |
| 28 | LRCKI2 | I | Sampling clock input for audio IF serial data |
| 29 | BCKI2 | I | Bit clock input terminal for audio IF serial data |
| 30 | SDI2 | I | Audio IF data input |
| 31 | VSS | — | Ground |
| 32 | HACN | O | Acknowledge signal output for host IF |
| 33 | HDIN | I | Serial data input for host IF |
| 34 | HCLK | I | Clock input for host IF |
| 35 | HDOUT | O | Serial data output for host IF |
| 36 | HCS | I | Chip select input for host IF |
| 37 | SDCLK | O | SDRAM clock output (Not used) |
| 38 | CLKEN | O | SDRAM clock enable signal output (Not used) |
| 39 | RAS | O | Raw address strobe signal output (Not used) |
| 40 | VDDI | I | Power supply |
| 41 | VSS | — | Ground |
| 42 | CAS | O | Column address strobe output (Not used) |
| 43 | DQM/OE0 | O | Data input /output mask signal output (Not used) |
| 44 | CS0 | O | External memory chip select (SRAM) |
| 45 | WE0 | O | SRAM write enable output |
| 46 | VDDE | I | Power supply |
| 47 | WMD1 | I | External memory wait mode signal input (Not used) |
| 48 | VSS | — | Ground |
| 49 | WMD0 | I | External memory wait mode signal input (Not used) |
| 50 | PAGE2 | O | External memory page switching signal output (Not used) |
| 51 | VSS | — | Ground |
| 52 | PAGE1 | O | External memory page switching signal output (Not used) |
| 53 | PAGE0 | O | External memory page switching signal output (Not used) |
| 54 | BOOT | I | Boot mode control signal input (Not used) |
| 55 | BTACT | O | Boot mode state display signal output (Not used) |
| 56 | BST | I | Boot stop signal input |
| 57 | MOD1 | I | Operation mode signal input (Not used) |

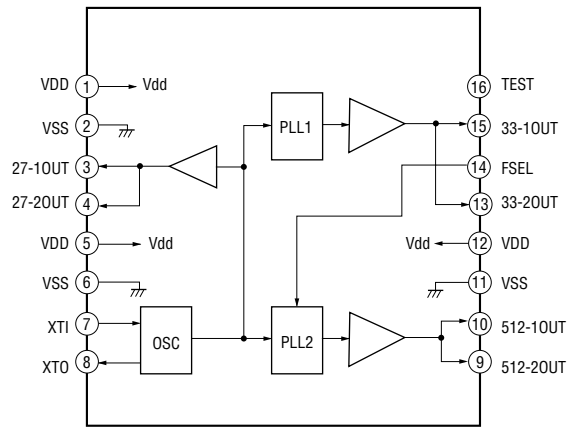
| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 58 | MOD0 | I | Operation mode signal input (Not used) |
| 59 | EXLOCK | I | Lock signal input |
| 60 | VDDI | I | Power supply |
| 61 | VSS | — | Ground |
| 62, 63 | A17, A16 | O | External memory address output (SRAM) (Not used) |
| 64 to 66 | A15 - A13 | O | External memory address output (SRAM) |
| 67 | GP10 | I/O | LRCK0 |
| 68 | GP9 (DECODE) | O | DECODE |
| 69 | GP8 (AUDIO) | I | AUDIO |
| 70 | VDDI | I | Power supply |
| 71 | VSS | — | Ground |
| 72 to 75 | D15 - D12 | I/O | External memory data input /output (general port) |
| 76 | VDDE | I | Power supply |
| 77 to 80 | D11 - D8 | I/O | External memory data input /output (general port) |
| 81 | VSS | — | Ground |
| 82 to 85 | A9 - A12 | O | External memory address output (SRAM) |
| 86 | TDO | O | Simple emulation data output (Not used) |
| 87 | TMS | I | Simple emulation data input start, end terminal (Not used) |
| 88 | XTRST | I | Simple emulation async BREAK signal input terminal (Not used) |
| 89 | TCK | I | Simple emulation clock signal input (Not used) |
| 90 | TDI | I | Simple emulation data input (Not used) |
| 91 | VSS | — | Ground |
| 92 to 97 | A8 - A3 | O | External memory address output (SRAM) |
| 98, 99 | D7, D6 | I/O | External memory data input/output (SRAM) |
| 100 | VDDI | I | Power supply |
| 101 | VSS | — | Ground |
| 102 to 105 | D5 - D2 | I/O | External memory data input/output (SRAM) |
| 106 | VDDE | I | Power supply |
| 107, 108 | D1, D0 | I/O | External memory data input/output (SRAM) |
| 109, 110 | A2, A1 | O | External memory address output (SRAM) |
| 111 | VSS | — | Ground |
| 112 | A0 | O | External memory address output (SRAM) |
| 113 | PM | I | PLL initialization input terminal |
| 114, 115 | SDI3, SDI4 | I | Audio IF data input (Not used) |
| 116 | SYNC | I | Sync/async selection input (L : sync, H : async) |
| 117 to 119 | VSS | — | Ground |
| 120 | VDDI | I | Power supply |

## 6-34. IC BLOCK DIAGRAMS

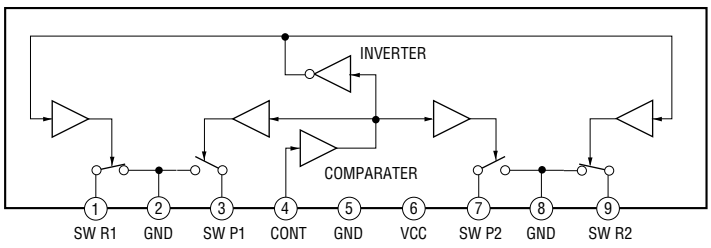
### IC302 CXD9635R (MB BOARD (2/5))



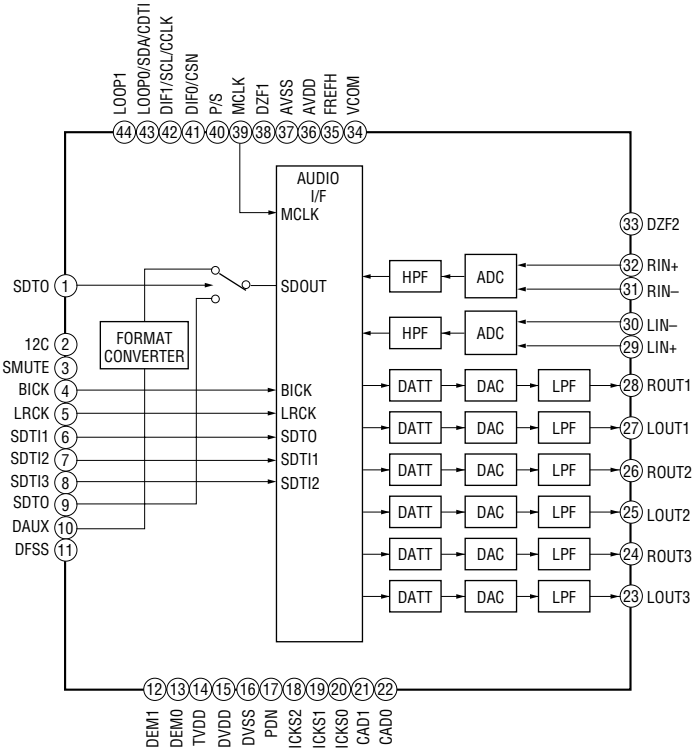

### IC102 IMIC6001BTD (MB BOARD (4/5))



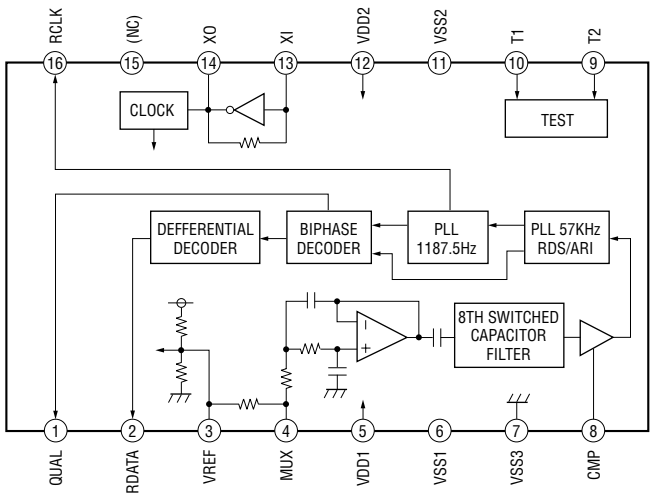

### IC302 μPC1330HA (MAIN BOARD (1/3))



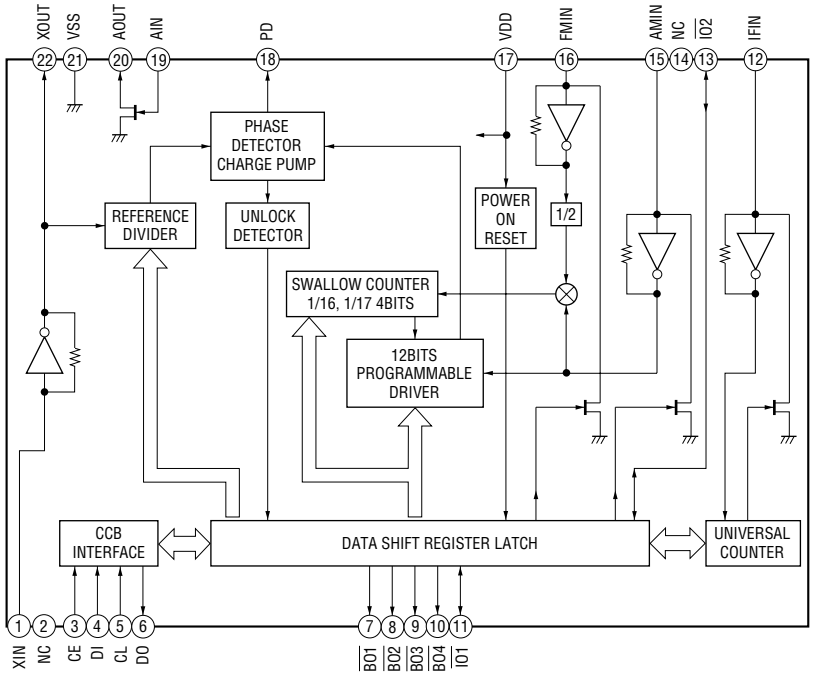
## IC605 AK4527 (DSP BOARD (1/2))



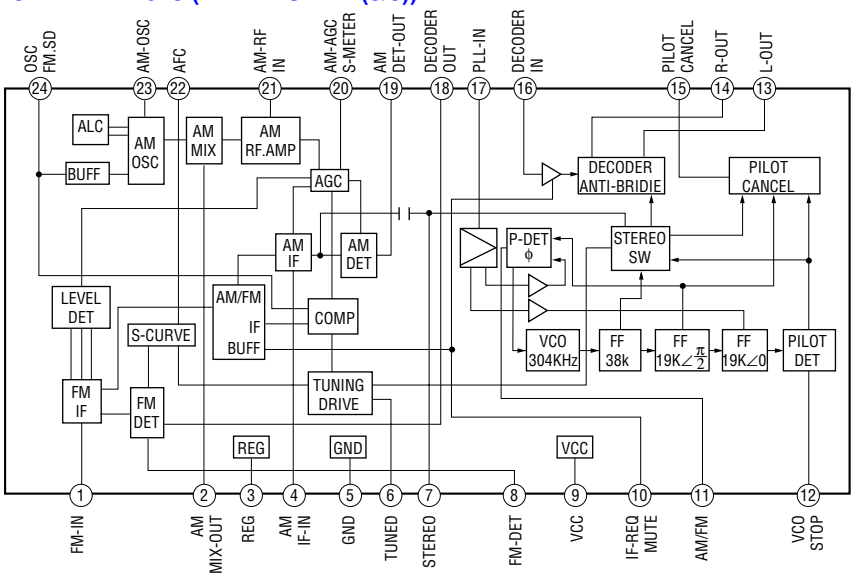

## IC81 BU1924 (MAIN BOARD (3/3))



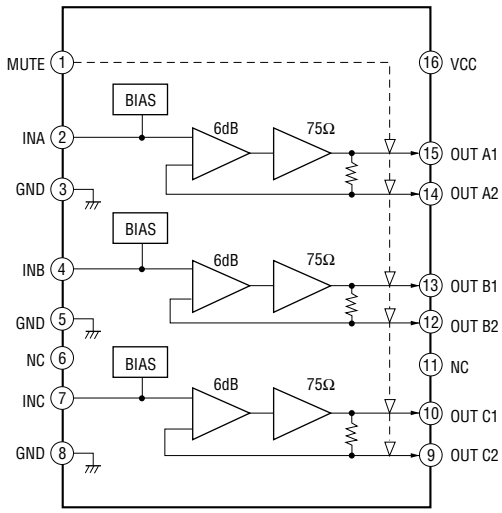

## IC51 LC72131D (MAIN BOARD (3/3))



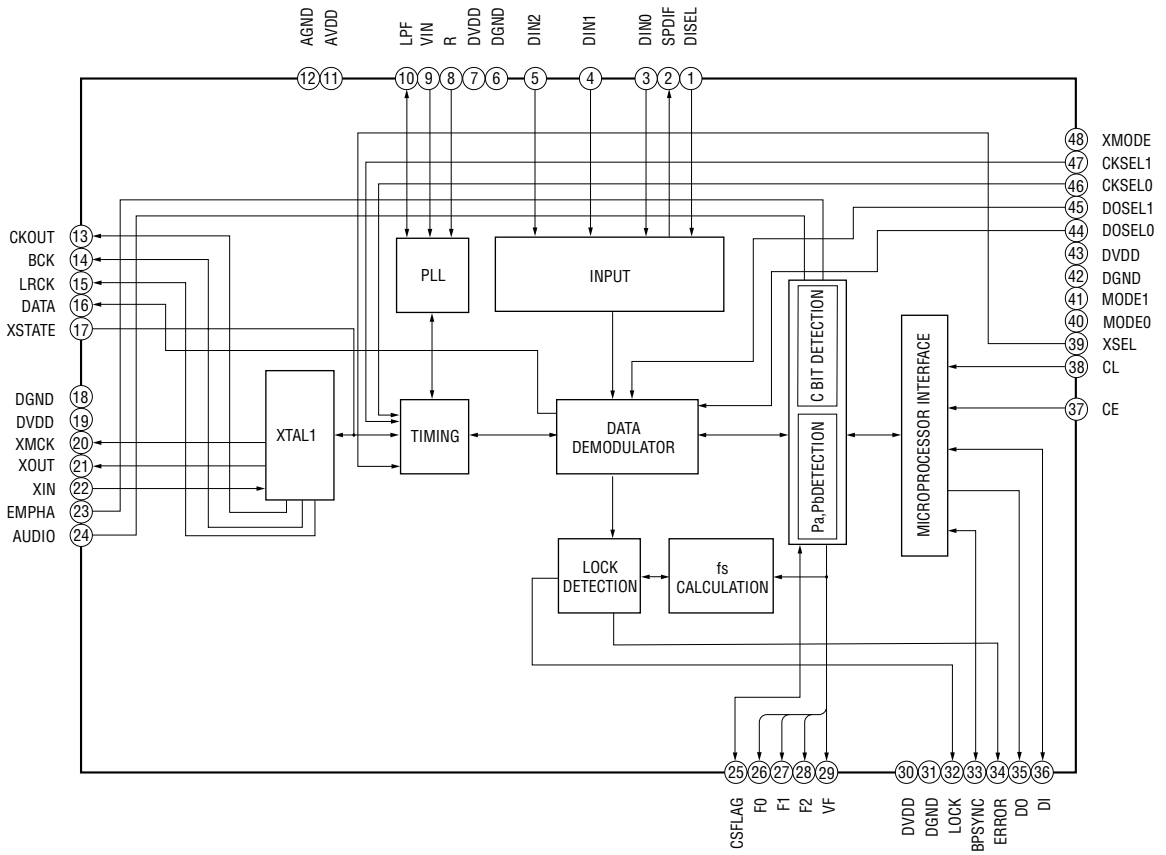
## IC11 LA1845 (MAIN BOARD (3/3))



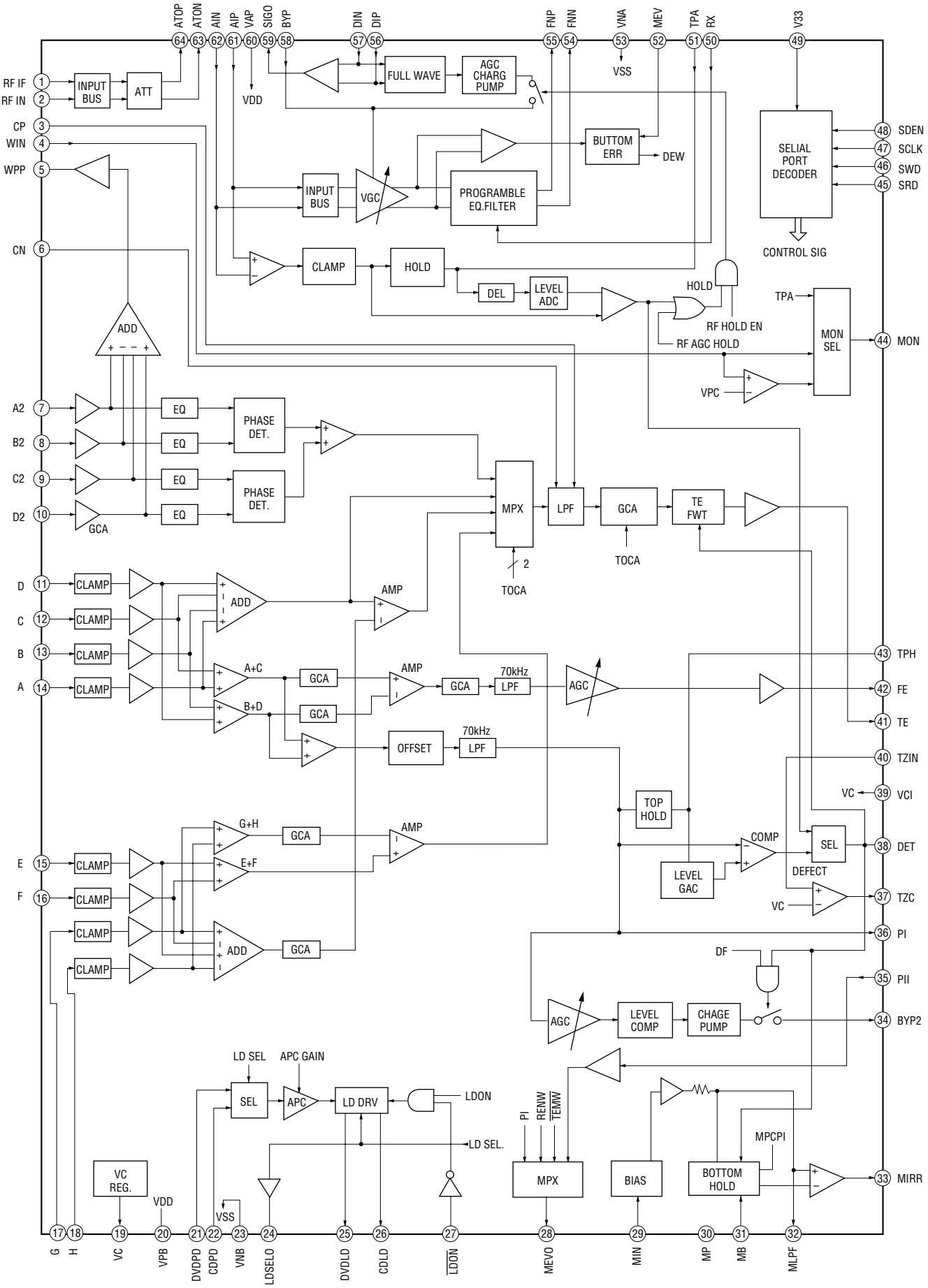

## IC701 BA7666FS-E2 (MB BOARD (5/5))




## IC604 LC89056W-E (DSP BOARD (2/2))



## IC001 SP3728AC (RF-240 BOARD)



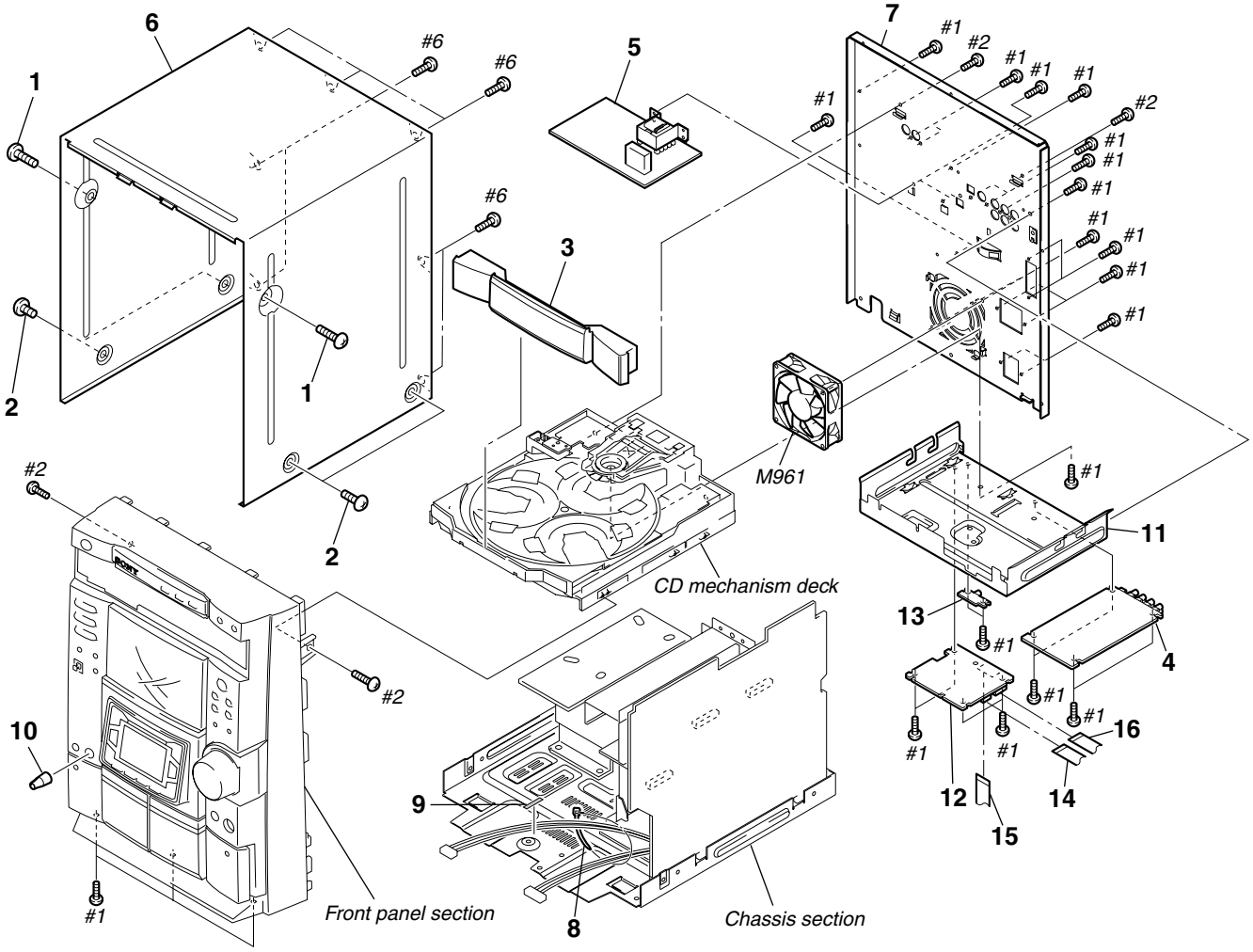
# SECTION 7
# EXPLODED VIEWS

NOTE:
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories are given in the last of this parts list.
- Abbreviation
  CND : Canadian model
  EA : Saudi Arabia model
  MY : Malaysia model
  SP : Singapore model
  TH : Thai model
  MX : Mexican model
  E91 : 220V AC area model
  AUS : Australian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

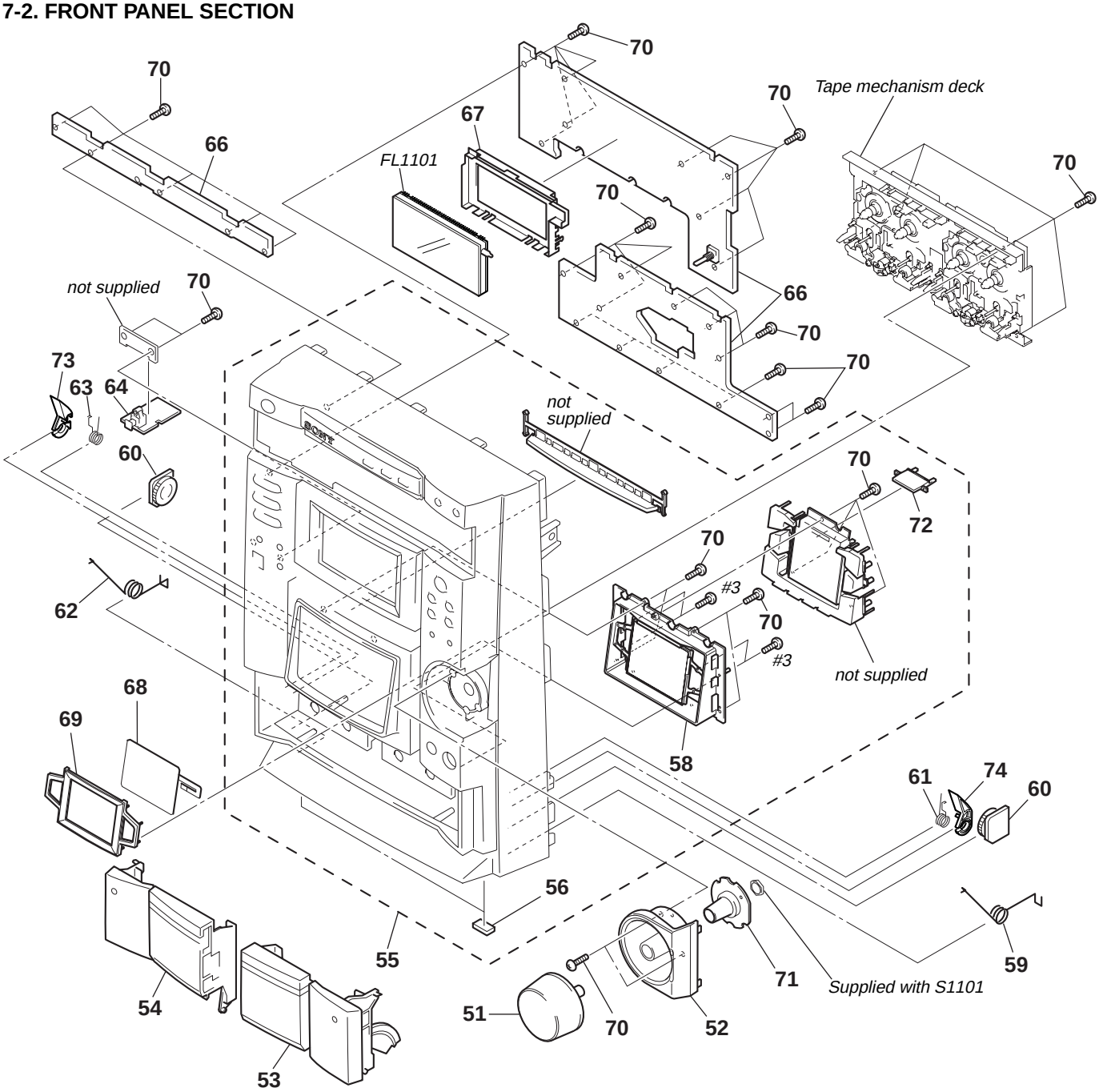
## 7-1. MAIN SECTION




| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 1 | 3-363-099-41 | SCREW (CASE 3 TP2) | |
| 2 | 3-363-099-01 | SCREW (CASE 3 TP2) | |
| 3 | X-4954-184-1 | PANEL ASSY, LOADING (DVD) | |
| 4 | A-4475-600-A | DSP BOARD, COMPLETE (US,CND) | |
| 4 | A-4475-638-A | DSP BOARD, COMPLETE (AEP,UK) | |
| 4 | A-4475-962-A | DSP BOARD, COMPLETE (TH) | |
| 4 | A-4475-982-A | DSP BOARD, COMPLETE (AUS,E,E91,EA,MX,SP,MY) | |
| 5 | 1-680-190-11 | SUB TRANS BOARD | |
| 6 | 4-231-828-11 | CASE | |
| 7 | 4-236-826-01 | PANEL, BACK (US) | |
| 7 | 4-236-826-11 | PANEL, BACK (CND) | |
| 7 | 4-236-826-21 | PANEL, BACK (AEP,UK) | |
| 7 | 4-236-826-31 | PANEL, BACK (SP,MY) | |
| 7 | 4-236-826-41 | PANEL, BACK (E) | |
| 7 | 4-236-826-51 | PANEL, BACK (MX) | |
| 7 | 4-236-826-61 | PANEL, BACK (EA) | |
| 7 | 4-236-826-71 | PANEL, BACK (AUS) | |
| 7 | 4-236-826-81 | PANEL, BACK (TH) | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 7 | 4-236-826-91 | PANEL, BACK (E91) | |
| 8 | 3-701-748-00 | CLAMP | |
| * 9 | 3-378-109-01 | CUSHION, SARANET | |
| 10 | 4-231-805-02 | KNOB (MIC) (AUS,E,E91,EA,MX,SP,MY,TH) | |
| 11 | 4-231-835-01 | BRACKET (DVD) | |
| 12 | A-4727-088-A | MB BOARD, COMPLETE (TH) | |
| 12 | A-4727-126-A | MB BOARD, COMPLETE (US,CND) | |
| 12 | A-4727-147-A | MB BOARD, COMPLETE (AEP,UK) | |
| 12 | A-4727-152-A | MB BOARD, COMPLETE (EA) | |
| 12 | A-4727-167-A | MB BOARD, COMPLETE (SP,MY) | |
| 12 | A-4727-172-A | MB BOARD, COMPLETE (AUS) | |
| 12 | A-4727-203-A | MB BOARD, COMPLETE (E,MX) | |
| 12 | A-4727-272-A | MB BOARD, COMPLETE (E91) | |
| 13 | 1-682-902-11 | VIDEO BOARD | |
| 14 | 1-823-367-11 | WIRE (FLAT TYPE) (9 CORE) | |
| 15 | 1-823-370-11 | WIRE (FLAT TYPE) (6 CORE) | |
| 16 | 1-823-368-11 | WIRE (FLAT TYPE) (25 CORE) | |
| M961 | 1-763-072-11 | FAN, DC | |

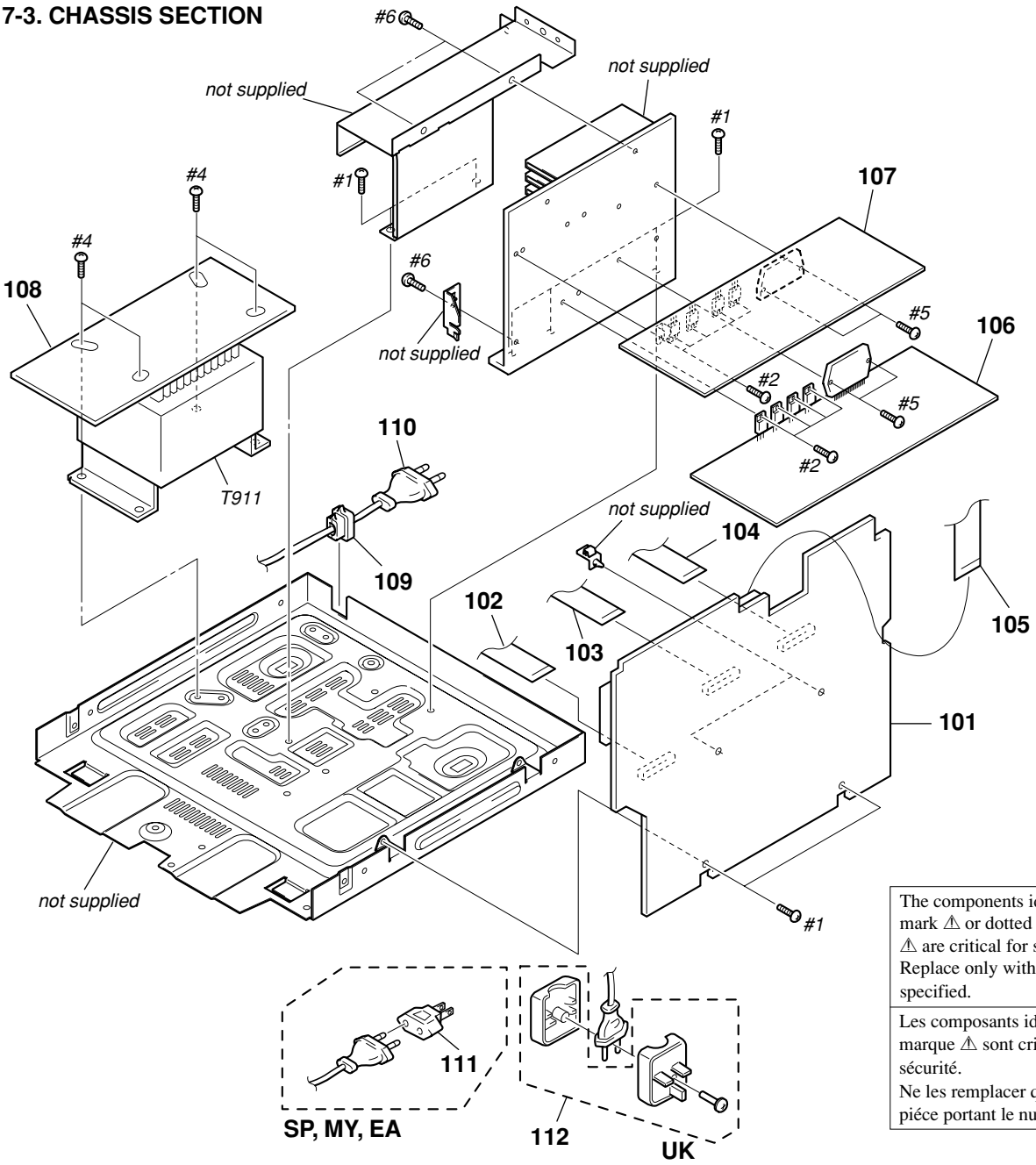
## 7-2. FRONT PANEL SECTION




| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 51 | 4-231-804-01 | KNOB (VOL) | |
| 52 | 4-231-803-01 | RING (VOL) | |
| 53 | X-4953-340-1 | LID (B) ASSY, CASSETTE | |
| 54 | X-4953-339-1 | LID (A) ASSY, CASSETTE | |
| 55 | X-4954-177-1 | PANEL ASSY, FRONT (US) | |
| 55 | X-4954-178-1 | PANEL ASSY, FRONT (AEP,UK) | |
| 55 | X-4954-179-1 | PANEL ASSY, FRONT (AUS,E,E91,EA,MX,SP,MY,TH) | |
| 55 | X-4954-195-1 | PANEL ASSY, FRONT (CND) | |
| 56 | 4-225-252-01 | CUSHION (FOOT) | |
| 58 | 4-231-814-01 | ESCUTCHEON (PAD) | |
| 59 | 4-231-838-01 | SPRING (TC-B) | |
| 60 | 4-224-104-11 | DAMPER | |
| 61 | 4-231-841-01 | SPRING (HEART CAM-B) | |
| 62 | 4-231-837-01 | SPRING (TC-A) | |
| 63 | 4-231-836-01 | SPRING (HEART CAM-A) | |
| 64 | 1-680-279-11 | OPT IN BOARD | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 66 | A-4727-117-A | PANEL BOARD, COMPLETE (including CD PANEL BOARD) (US) | |
| 66 | A-4727-133-A | PANEL BOARD, COMPLETE (including CD PANEL BOARD) (CND) | |
| 66 | A-4727-141-A | PANEL BOARD, COMPLETE (including CD PANEL BOARD) (AEP,UK) | |
| 66 | A-4727-155-A | PANEL BOARD, COMPLETE (including CD PANEL BOARD) (AUS,E,E91,EA,MX,SP,MY) | |
| 66 | A-4727-219-A | PANEL BOARD, COMPLETE (including CD PANEL BOARD) (TH) | |
| 67 | 4-224-584-01 | HOLDER FL | |
| 68 | 1-796-001-11 | TOUCH PAD | |
| 69 | 4-231-815-01 | HOLDER (PAD) | |
| 70 | 4-951-620-01 | SCREW (2.6X8), +BVTP | |
| 71 | 4-234-763-01 | COVER (VOL) | |
| 72 | 4-231-818-01 | INDICATOR (BLUE) | |
| 73 | 4-231-824-01 | HEART CAM (A) | |
| 74 | 4-231-825-01 | HEART CAM (B) | |
| FL1101 | 1-518-722-11 | INDICATOR TUBE, FLUORESCENT | |

## 7-3. CHASSIS SECTION




The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

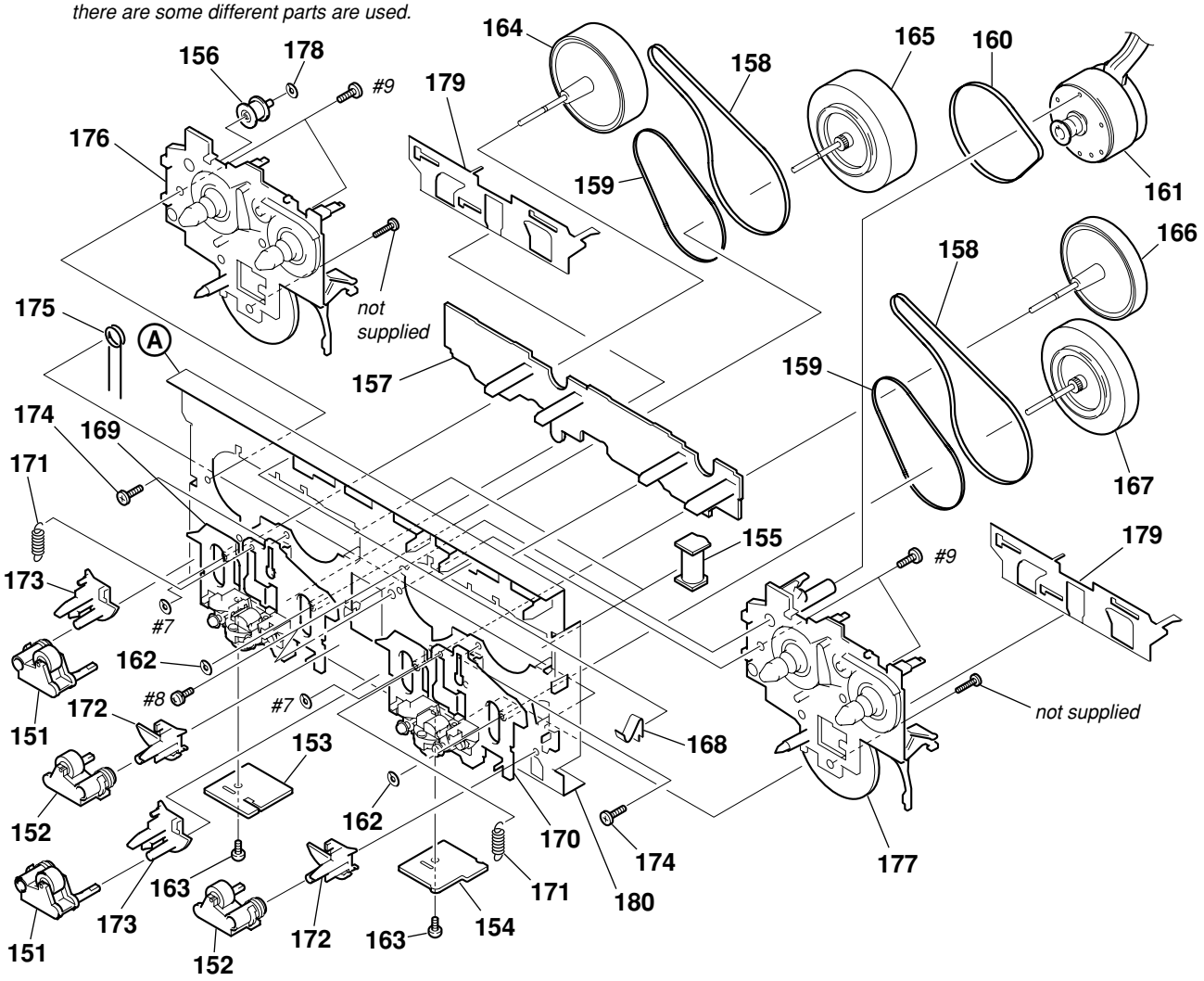
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 101 | A-4727-119-A | MAIN BOARD, COMPLETE (US,CND) | |
| 101 | A-4727-143-A | MAIN BOARD, COMPLETE (AEP,UK) | |
| 101 | A-4727-150-A | MAIN BOARD, COMPLETE (EA) | |
| 101 | A-4727-163-A | MAIN BOARD, COMPLETE (AUS,E91,SP,MY) | |
| 101 | A-4727-201-A | MAIN BOARD, COMPLETE (E,MX) | |
| 101 | A-4727-227-A | MAIN BOARD, COMPLETE (TH) | |
| 102 | 1-773-042-11 | WIRE (FLAT TYPE) (17 CORE) | |
| 103 | 1-757-419-11 | WIRE (FLAT TYPE) (21 CORE) | |
| 104 | 1-757-420-11 | WIRE (FLAT TYPE) (23 CORE) | |
| 105 | 1-823-369-11 | WIRE (FLAT TYPE) (12 CORE) | |
| 106 | A-4727-111-A | FRONT AMP BOARD, COMPLETE (US,CND) | |
| 106 | A-4727-135-A | FRONT AMP BOARD, COMPLETE (AEP,UK) | |
| 106 | A-4727-161-A | FRONT AMP BOARD, COMPLETE (AUS,E91,EA,SP,MY) | |
| 106 | A-4727-199-A | FRONT AMP BOARD, COMPLETE (E,MX) | |
| 106 | A-4727-221-A | FRONT AMP BOARD, COMPLETE (TH) | |
| 107 | A-4727-113-A | SURROUND AMP BOARD, COMPLETE(US,CND) | |
| 107 | A-4727-137-A | SURROUND AMP BOARD, COMPLETE (AEP,UK) | |
| 107 | A-4727-157-A | SURROUND AMP BOARD, COMPLETE (AUS,E91,EA,SP,MY) | |
| 107 | A-4727-197-A | SURROUND AMP BOARD, COMPLETE (E,MX) | |
| 107 | A-4727-223-A | SURROUND AMP BOARD, COMPLETE (TH) | |
| 108 | 1-680-189-11 | TRANS BOARD | |
| 109 | 3-703-571-11 | BUSHING (S) (4516), CORD (E,MX,TH) | |
| * 109 | 3-703-244-00 | BUSHING (2104), CORD (EXCEPT E,MX,TH) | |
| ⚠110 | 1-777-071-81 | CORD, POWER (AEP,E91,EA,SP,MY,UK) | |
| ⚠110 | 1-783-203-11 | CORD, POWER (AUS) | |
| ⚠110 | 1-783-531-31 | CORD, POWER (CND,US) | |
| ⚠110 | 1-791-901-11 | CORD, POWER (E,MX,TH) | |
| ⚠111 | 1-569-008-21 | ADAPTOR, CONVERSION (EA,SP,MY) | |
| ⚠112 | 1-770-019-11 | ADAPTOR, CONVERSION PLUG 3P (UK) | |
| ⚠T911 | 1-437-510-11 | TRANSFORMER, POWER (US,CND) | |
| ⚠T911 | 1-437-511-11 | TRANSFORMER, POWER (AEP,UK) | |
| ⚠T911 | 1-437-512-11 | TRANSFORMER, POWER (AUS,E,E91,EA,MX,SP,MY,TH) | |

## 7-4. TAPE MECHANISM DECK SECTION-1 (TCM-230MWR41)

• The thing that a part Ⓐ curves is TCM-230MWR41.

***Note:*** *Two different types of tape mechanism are used depending on models. They maintain compatibility as an entire mechanism even though there are some different parts are used.*



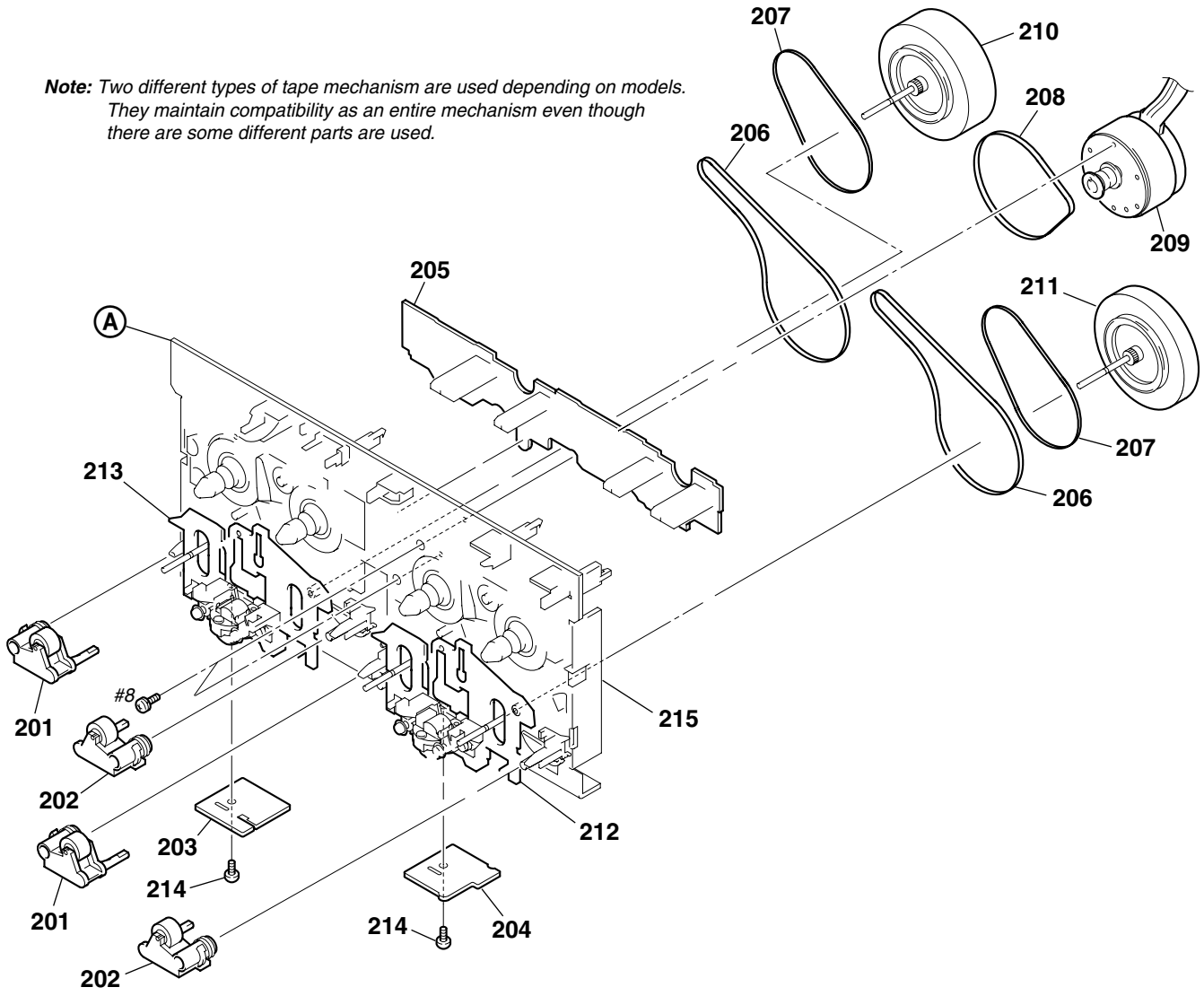

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 151 | X-3374-156-4 | PINCH LEVER (REV) ASSY | |
| 152 | X-3374-155-5 | PINCH LEVER (FWD) ASSY | |
| 153 | A-2007-839-A | HEAD (A) MOUNTED PC BOARD | |
| 154 | A-2007-840-A | HEAD (B) MOUNTED PC BOARD | |
| 155 | 1-454-887-32 | SOLENOID, PLUNGER | |
| 156 | 3-040-580-02 | PULLEY (TENSION) | |
| 157 | A-2007-838-A | LEAF SW BOARD, COMPLETE | |
| 158 | 3-041-946-01 | BELT (CAPSTAN B) | |
| 159 | 3-041-947-01 | BELT (FR) | |
| 160 | 4-227-239-01 | BELT (CAPSTAN C) | |
| 161 | X-3378-241-1 | MOTOR ASSY | |
| 162 | 3-019-208-01 | WASHER, STOPPER | |
| 163 | 4-227-872-11 | SCREW (+PTT 2X4), GROUND POINT | |
| 164 | X-3378-041-1 | FLYWHEEL (A-REV) ASSY | |
| 165 | X-3378-040-1 | FLYWHEEL (A-FWD) ASSY | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 166 | X-3378-043-1 | FLYWHEEL (B-REV) ASSY | |
| 167 | X-3378-042-1 | FLYWHEEL (B-FWD) ASSY | |
| 168 | 4-229-083-01 | SPRING (CASSETTE), LEAF | |
| 169 | A-2004-771-A | BASE (A) ASSY, HEAD | |
| 170 | A-2004-772-A | BASE (B) ASSY, HEAD | |
| 171 | 3-016-574-11 | SPRING (HEAD), TENSION | |
| 172 | 3-016-564-01 | BASE (PINCH LEVER FWD) | |
| 173 | 3-016-565-01 | BASE (PINCH LEVER REV) | |
| 174 | 3-703-454-21 | SCREW (1.7X6), TAPPING | |
| 175 | 4-228-449-01 | SPRING (REVERSE SLIDER) | |
| 176 | A-2004-793-A | CHASSIS (A) ASSY, SUB | |
| 177 | A-2004-794-A | CHASSIS (B) ASSY, SUB | |
| 178 | 3-016-533-01 | WASHER (FR), STOPPER | |
| 179 | 3-016-566-01 | SLIDER, REVERSE | |
| 180 | A-2004-773-A | CHASSIS ASSY, MAIN | |

## 7-5. TAPE MECHANISM DECK SECTION-2 (TCM-230AWR41)

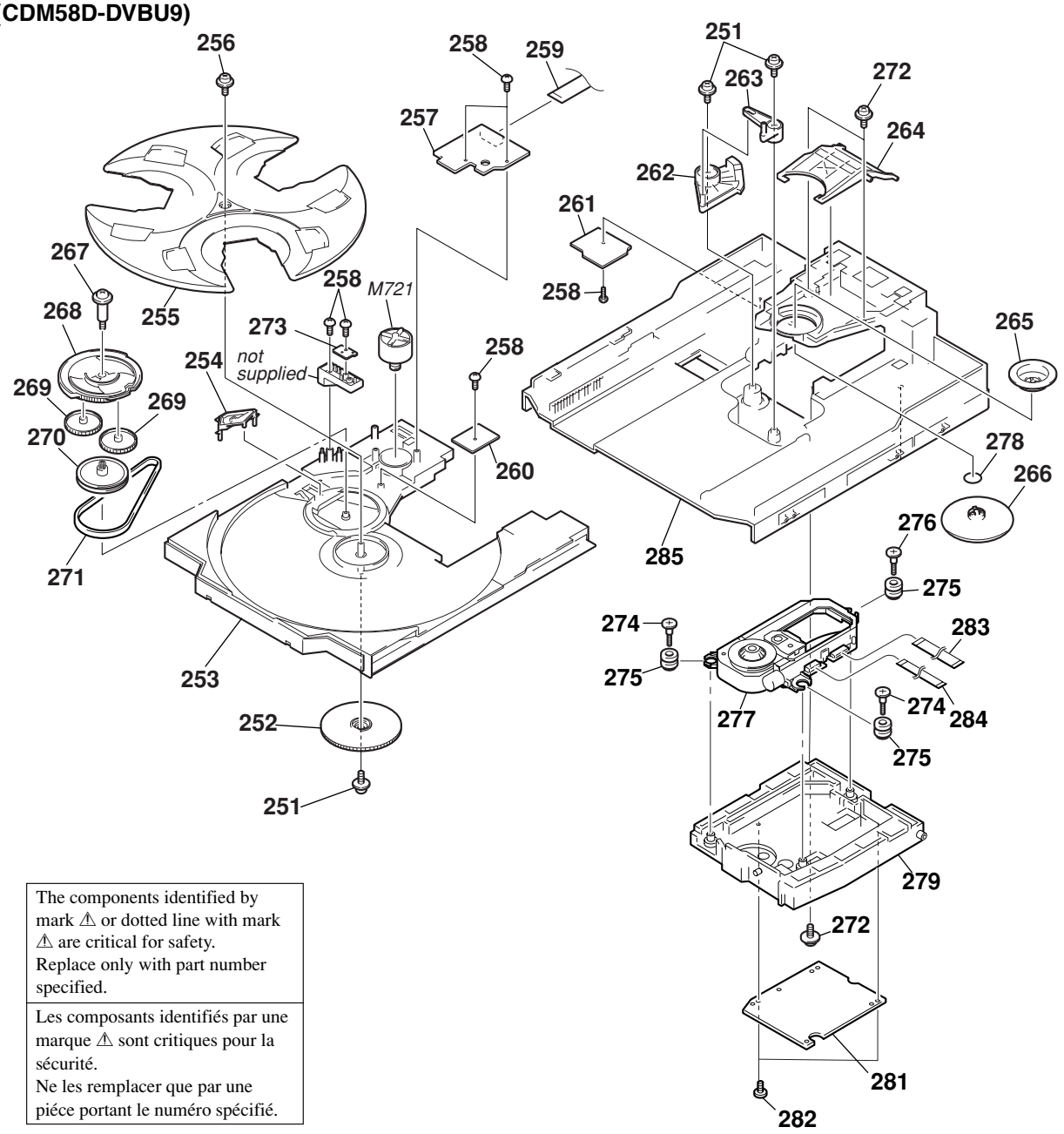
• The thing that a part Ⓐ doesn't curve is TCM-230AWR41.

***Note:*** *Two different types of tape mechanism are used depending on models. They maintain compatibility as an entire mechanism even though there are some different parts are used.*




| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 201 | X-3374-156-5 | PINCH LEVER (REV) ASSY | |
| 202 | X-3374-155-4 | PINCH LEVER (FWD) ASSY | |
| 203 | A-2007-839-A | HEAD (A) MOUNTED PC BOARD | |
| 204 | A-2007-840-A | HEAD (B) MOUNTED PC BOARD | |
| 205 | A-2007-838-A | LEAF SW BOARD, COMPLETE | |
| 206 | 3-041-946-01 | BELT (CAPSTAN B) | |
| 207 | 3-041-947-01 | BELT (FR) | |
| 208 | 4-227-239-01 | BELT (CAPSTAN C) | |
| 209 | X-3378-241-1 | MOTOR ASSY | |
| 210 | X-3378-040-1 | FLYWHEEL (A-FWD) ASSY | |
| 211 | X-3378-042-1 | FLYWHEEL (B-FWD) ASSY | |
| 212 | A-2004-755-A | BASE (B) ASSY, HEAD | |
| 213 | A-2004-754-A | BASE (A) ASSY, HEAD | |
| 214 | 4-227-872-11 | SCREW (+PTT 2X4), GROUND POINT | |
| 215 | A-2004-792-A | CHASSIS ASSY, MAIN | |

## 7-6. DVD MECHANISM DECK SECTION (CDM58D-DVBU9)




| |
|---|
| The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified. |
| Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié. |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 251 | 4-933-134-51 | SCREW (+PTPWH 2.6X8) | |
| 252 | 4-221-679-01 | CAM (RELAY) | |
| 253 | 4-231-452-02 | TABLE (NEW) | |
| 254 | 4-221-686-01 | LEVER (CHANGE) | |
| 255 | 4-236-286-01 | TRAY (DVD) | |
| 256 | 4-933-134-11 | SCREW (+PTPWH M2.6X8) | |
| 257 | 1-682-791-11 | MOTOR BOARD | |
| 258 | 4-951-620-01 | SCREW (2.6X8), +BVTP | |
| 259 | 1-791-983-12 | WIRE (FLAT TYPE) (8 CORE) | |
| 260 | 1-682-792-11 | SENSOR BOARD | |
| 261 | 1-682-790-11 | DRIVER BOARD | |
| 262 | X-4952-608-3 | CAM (U/D) ASSY | |
| 263 | 4-221-681-01 | LEVER (EX) | |
| 264 | 4-221-682-01 | LEVER (LIFTER) | |
| 265 | 4-233-594-01 | PULLEY (B) (DVD), CHUCKING | |
| 266 | X-4954-450-1 | PULLEY (240) ASSY | |
| 267 | 4-222-097-01 | SCREW, STEP | |
| 268 | 4-221-678-06 | CAM (CONTROL) | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 269 | 4-221-683-01 | GEAR (U) | |
| 270 | 4-221-685-01 | PULLEY (S) | |
| 271 | 4-222-095-01 | BELT | |
| 272 | 4-985-672-01 | SCREW (+PTPWH M2.6), FLOATING | |
| 273 | 1-682-793-11 | DIODE BOARD | |
| 274 | 4-237-218-01 | SCREW (10), STEP | |
| 275 | 3-053-847-01 | INSULATOR | |
| 276 | 4-236-450-01 | SCREW (L), STEP | |
| ⚠277 | 8-820-144-06 | OPTICAL PICK-UP KHM-240AAA (TYPE A) | |
| ⚠277 | A-6062-709-A | SERVICE ASSY, KHM-270AAA (TYPE B) | |
| 278 | 3-053-844-01 | YOKE | |
| 279 | X-4954-056-1 | HOLDER (DVD) ASSY | |
| 281 | A-4726-861-A | RF-240 BOARD, COMPLETE | |
| 282 | 3-341-549-01 | SCREW(2.6X12)(DIA.7.5),+PTP WH | |
| 283 | 1-823-621-11 | CABLE, FLEXIBLE FLAT (26 CORE) | |
| 284 | 1-823-622-11 | WIRE (FLAT TYPE) (9 CORE) | |
| 285 | 4-221-674-03 | CHASSIS | |
| M721 | A-4672-826-A | MOTOR ASSY | |

# SECTION 8
# ELECTRICAL PARTS LIST

CD PANEL | DIODE | DRIVER | DSP

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: µF
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...
- Abbreviation
  CND : Canadian model
  EA : Saudi Arabia model
  MY : Malaysia model
  SP : Singapore model
  TH : Thai model
  MX : Mexican model
  E91 : 220V AC area model
  AUS : Australian model
- Refer to servicing notes (page 5) for discrimination of TYPE A/B.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| | | CD PANEL BOARD (included in PANEL BOARD) | | | |
| | | ********** | | | |
| | | < DIODE > | | | |
| D1114 | 8-719-057-97 | DIODE SEL5923A-TP15 (DISC 1) | | | |
| D1115 | 8-719-057-97 | DIODE SEL5923A-TP15 (DISC 2) | | | |
| D1116 | 8-719-057-97 | DIODE SEL5923A-TP15 (DISC 3) | | | |
| D1117 | 8-719-071-44 | DIODE SELS5223C-TP15 (I/⏻) | | | |
| | | < TRANSISTOR > | | | |
| Q1114 | 8-729-900-80 | TRANSISTOR DTC114ES | | | |
| Q1115 | 8-729-900-80 | TRANSISTOR DTC114ES | | | |
| Q1116 | 8-729-900-80 | TRANSISTOR DTC114ES | | | |
| | | < RESISTOR > | | | |
| R1138 | 1-249-407-11 | CARBON | 150 | 5% 1/4W F | |
| R1139 | 1-249-407-11 | CARBON | 150 | 5% 1/4W F | |
| R1140 | 1-249-407-11 | CARBON | 150 | 5% 1/4W F | |
| R1141 | 1-249-417-11 | CARBON | 1K | 5% 1/4W F | |
| R1150 | 1-249-421-11 | CARBON | 2.2K | 5% 1/4W F | |
| R1151 | 1-249-422-11 | CARBON | 2.7K | 5% 1/4W F | |
| R1152 | 1-249-424-11 | CARBON | 3.9K | 5% 1/4W F | |
| R1153 | 1-249-426-11 | CARBON | 5.6K | 5% 1/4W | |
| R1154 | 1-249-428-11 | CARBON | 8.2K | 5% 1/4W F | |
| | | < SWITCH > | | | |
| S1110 | 1-762-875-21 | SWITCH, KEYBOARD (OPEN/CLOSE ) | | | |
| S1111 | 1-762-875-21 | SWITCH, KEYBOARD (DISC SKIP EX-CHANGE) | | | |
| S1112 | 1-762-875-21 | SWITCH, KEYBOARD (DISC 3) | | | |
| S1113 | 1-762-875-21 | SWITCH, KEYBOARD (DISC 2) | | | |
| S1114 | 1-762-875-21 | SWITCH, KEYBOARD (DISC 1) | | | |
| S1115 | 1-762-875-21 | SWITCH, KEYBOARD (I/⏻) | | | |
| ********** | | | | | |
| | 1-682-793-11 | DIODE BOARD | | | |
| | | ********** | | | |
| | | < DIODE > | | | |
| D731 | 8-719-082-30 | DIODE SIR-34ST3FK | | | |
| ********** | | | | | |
| | 1-682-790-11 | DRIVER BOARD | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C702 | 1-126-964-51 | ELECT | 10uF | 20% 50V | |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| | | < CONNECTOR > | | | |
| CN701 | 1-785-336-11 | PIN, CONNECTOR(LIGHT ANGLE)10P | | | |
| CN702 | 1-785-550-11 | CONNECTOR, FFC/FPC 8P | | | |
| | | < DIODE > | | | |
| D701 | 8-719-983-68 | DIODE MTZJ-T-72-3.9A | | | |
| | | < IC > | | | |
| IC701 | 8-759-598-69 | IC BA6956AN | | | |
| | | < RESISTOR > | | | |
| R701 | 1-249-411-11 | CARBON | 330 | 5% 1/4W | |
| R702 | 1-249-401-11 | CARBON | 47 | 5% 1/4W F | |
| ********** | | | | | |
| | A-4475-600-A | DSP BOARD, COMPLETE (US,CND) | | | |
| | A-4475-638-A | DSP BOARD, COMPLETE (AEP,UK) | | | |
| | A-4475-962-A | DSP BOARD, COMPLETE (TH) | | | |
| | A-4475-982-A | DSP BOARD, COMPLETE (AUS,E,E91,EA,MX,SP,MY) | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C601 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C602 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% 25V | |
| C603 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C604 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C605 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C606 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C607 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C608 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C609 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C610 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C611 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C612 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C613 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C614 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C615 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C616 | 1-126-934-11 | ELECT | 220uF | 20% 10V | |
| C617 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C618 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% 25V | |
| C619 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C620 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |
| C621 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% 25V | |
| C622 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | 25V | |

## DSP

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| C623 | 1-126-934-11 | ELECT | 220uF | 20% | 10V |
| C624 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C625 | 1-162-915-11 | CERAMIC CHIP | 10PF | 0.5PF | 50V |
| C626 | 1-162-915-11 | CERAMIC CHIP | 10PF | 0.5PF | 50V |
| C627 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C628 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C629 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C630 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C631 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C632 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C633 | 1-126-934-11 | ELECT | 220uF | 20% | 10V |
| C634 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C635 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C636 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C637 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C638 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C639 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C640 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C641 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C642 | 1-162-971-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C643 | 1-162-971-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C644 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C645 | 1-126-934-11 | ELECT | 220uF | 20% | 10V |
| C646 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| C647 | 1-126-934-11 | ELECT | 220uF | 20% | 10V |
| C648 | 1-126-934-11 | ELECT | 220uF | 20% | 10V |
| C649 | 1-164-360-11 | CERAMIC CHIP | 0.1uF | | 16V |
| C650 | 1-126-934-11 | ELECT | 220uF | 20% | 10V |
| C651 | 1-164-360-11 | CERAMIC CHIP | 0.1uF | | 16V |
| C652 | 1-164-360-11 | CERAMIC CHIP | 0.1uF | | 16V |
| C653 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C654 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C655 | 1-164-360-11 | CERAMIC CHIP | 0.1uF | | 16V |
| C656 | 1-126-934-11 | ELECT | 220uF | 20% | 10V |
| C657 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| C658 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C659 | 1-126-934-11 | ELECT | 220uF | 20% | 10V |
| C660 | 1-126-934-11 | ELECT | 220uF | 20% | 10V |
| C661 | 1-126-934-11 | ELECT | 220uF | 20% | 10V |
| C662 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C664 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C665 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C666 | 1-126-934-11 | ELECT | 220uF | 20% | 10V |
| C667 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C668 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C669 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C670 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C671 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C672 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C673 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C674 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C675 | 1-126-193-11 | ELECT | 1uF | 20% | 50V |
| C676 | 1-126-193-11 | ELECT | 1uF | 20% | 50V |
| C677 | 1-126-193-11 | ELECT | 1uF | 20% | 50V |
| C678 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C679 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C680 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C681 | 1-126-193-11 | ELECT | 1uF | 20% | 50V |
| C682 | 1-126-193-11 | ELECT | 1uF | 20% | 50V |
| C683 | 1-126-193-11 | ELECT | 1uF | 20% | 50V |
| C684 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C685 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C686 | 1-126-933-11 | ELECT | 100uF | 20% | 16V |
| C687 | 1-126-933-11 | ELECT | 100uF | 20% | 16V |
| C689 | 1-126-933-11 | ELECT | 100uF | 20% | 16V |
| C690 | 1-126-934-11 | ELECT | 220uF | 20% | 10V |
| C691 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C692 | 1-136-165-00 | MYLAR | 0.1uF | 5% | 50V |
| C693 | 1-136-165-00 | MYLAR | 0.1uF | 5% | 50V |
| C694 | 1-136-165-00 | MYLAR | 0.1uF | 5% | 50V |
| C695 | 1-136-165-00 | MYLAR | 0.1uF | 5% | 50V |
| C696 | 1-162-971-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C697 | 1-162-971-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C698 | 1-126-959-11 | ELECT | 0.47uF | 20% | 50V |
| C699 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C700 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C701 | 1-126-193-11 | ELECT | 1uF | 20% | 50V |
| C702 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C703 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C704 | 1-126-961-11 | ELECT | 2.2uF | 20% | 50V |
| C705 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C706 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C707 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C708 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C709 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C710 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C711 | 1-162-962-11 | CERAMIC CHIP | 470PF | 10% | 50V |
| C712 | 1-162-962-11 | CERAMIC CHIP | 470PF | 10% | 50V |
| C713 | 1-162-957-11 | CERAMIC CHIP | 220PF | 5% | 50V |
| C714 | 1-162-957-11 | CERAMIC CHIP | 220PF | 5% | 50V |
| C715 | 1-162-957-11 | CERAMIC CHIP | 220PF | 5% | 50V |
| C716 | 1-162-957-11 | CERAMIC CHIP | 220PF | 5% | 50V |
| C717 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C719 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C720 | 1-162-957-11 | CERAMIC CHIP | 220PF | 5% | 50V |
| C721 | 1-126-934-11 | ELECT | 220uF | 20% | 10V |
| C722 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C723 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C724 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C725 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C726 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C727 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C728 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C729 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C730 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C731 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C732 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C733 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C734 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C735 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C736 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C738 | 1-164-357-11 | CERAMIC CHIP | 0.001uF | 5% | 50V |
| C739 | 1-164-357-11 | CERAMIC CHIP | 0.001uF | 5% | 50V |
| C740 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C741 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C742 | 1-164-357-11 | CERAMIC CHIP | 0.001uF | 5% | 50V |
| C744 | 1-162-957-11 | CERAMIC CHIP | 220PF | 5% | 50V |
| | | < CONNECTOR > | | | |
| * CN601 | 1-568-941-11 | PIN, CONNECTOR 3P | | | |
| CN602 | 1-779-289-11 | CONNECTOR,FFC(LIF(NON-ZIF))21P | | | |
| CN603 | 1-779-291-11 | CONNECTOR,FFC(LIF(NON-ZIF))23P | | | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| | | < DIODE > | |
| D601 | 8-719-158-02 | DIODE RD3.9SB2 | |
| D604 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D605 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D606 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D607 | 8-719-058-24 | DIODE RB501V-40TE-17 (AUS,E,E91,EA,MX,SP,MY,TH) | |
| D608 | 8-719-058-24 | DIODE RB501V-40TE-17 (AUS,E,E91,EA,MX,SP,MY,TH) | |
| D609 | 8-719-058-24 | DIODE RB501V-40TE-17 (AUS,E,E91,EA,MX,SP,MY,TH) | |
| D610 | 8-719-058-24 | DIODE RB501V-40TE-17 (AUS,E,E91,EA,MX,SP,MY,TH) | |
| | | < ? > | |
| * EP601 | 1-537-738-21 | TERMINAL, EARTH | |
| * EP602 | 1-537-738-21 | TERMINAL, EARTH | |
| * EP603 | 1-537-738-21 | TERMINAL, EARTH | |
| * EP604 | 1-537-738-21 | TERMINAL, EARTH | |
| | | < FERRITE BEAD > | |
| FB601 | 1-216-864-11 | METAL CHIP 0 5% 1/16W | |
| FB602 | 1-216-864-11 | METAL CHIP 0 5% 1/16W | |
| FB603 | 1-500-445-21 | FERRITE 0UH | |
| FB604 | 1-216-864-11 | METAL CHIP 0 5% 1/16W | |
| FB605 | 1-216-864-11 | METAL CHIP 0 5% 1/16W | |
| FB606 | 1-216-805-11 | METAL CHIP 47 5% 1/16W | |
| FB607 | 1-500-445-21 | FERRITE 0UH | |
| FB608 | 1-500-445-21 | FERRITE 0UH | |
| FB609 | 1-500-445-21 | FERRITE 0UH | |
| | | < IC > | |
| IC601 | 8-759-698-76 | IC CXD9617R | |
| IC602 | 8-759-827-81 | IC IS61LV6416-15T(T&R) | |
| IC603 | 8-759-238-47 | IC TC74HCT7007AF(EL) | |
| IC604 | 8-759-825-15 | IC LC89056W-E | |
| IC605 | 8-759-657-47 | IC AK4527 | |
| IC606 | 8-759-825-13 | IC PCM1748E/2K | |
| IC607 | 8-749-018-85 | IC M61512FP | |
| IC608 | 8-759-549-25 | IC SN74LVU04APWR | |
| IC609 | 8-749-923-04 | IC TOTX178A (DIGITAL OUT OPTICAL) | |
| IC610 | 8-759-835-63 | IC NJM2391DL1-26-TE1 | |
| | | < JACK > | |
| J601 | 1-770-890-11 | JACK, PIN 6P (GAME/MD (VIDEO)) | |
| J602 | 1-774-785-11 | JACK, PIN 1P (SUB WOOFER OUT) | |
| | | < JUMPER RESISTOR > | |
| JR601 | 1-216-864-11 | METAL CHIP 0 5% 1/16W | |
| JR603 | 1-216-864-11 | METAL CHIP 0 5% 1/16W | |
| JR620 | 1-216-864-11 | METAL CHIP 0 5% 1/16W | |
| JR621 | 1-216-864-11 | METAL CHIP 0 5% 1/16W | |
| JR622 | 1-216-864-11 | METAL CHIP 0 5% 1/16W | |
| JR630 | 1-216-864-11 | METAL CHIP 0 5% 1/16W | |
| | | < TRANSISTOR > | |
| Q601 | 8-729-801-93 | TRANSISTOR 2SD1387-3 | |
| Q602 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q603 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q604 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q605 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q606 | 8-729-141-73 | TRANSISTOR 2SC3624A-T1L15L16 | |
| Q607 | 8-729-141-73 | TRANSISTOR 2SC3624A-T1L15L16 | |
| Q608 | 8-729-141-73 | TRANSISTOR 2SC3624A-T1L15L16 | |
| Q609 | 8-729-141-73 | TRANSISTOR 2SC3624A-T1L15L16 | |
| Q610 | 8-729-141-73 | TRANSISTOR 2SC3624A-T1L15L16 | |
| Q611 | 8-729-141-73 | TRANSISTOR 2SC3624A-T1L15L16 | |
| Q612 | 8-729-113-69 | TRANSISTOR FN1F4M-M32 | |
| Q613 | 8-729-113-13 | TRANSISTOR FA1A4M-L33 | |
| | | < RESISTOR > | |
| R601 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R602 | 1-216-813-11 | METAL CHIP 220 5% 1/16W | |
| R603 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R604 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R605 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R606 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R607 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R608 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R610 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R611 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R612 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R613 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R614 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R615 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R616 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R617 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R618 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R619 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R620 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R621 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R623 | 1-216-833-11 | METAL CHIP 10K 5% 1/16W | |
| R628 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R629 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R630 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R631 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R632 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R633 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R634 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R635 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R636 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R637 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R638 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R639 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R640 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R641 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R642 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R643 | 1-216-815-11 | METAL CHIP 330 5% 1/16W | |
| R644 | 1-216-815-11 | METAL CHIP 330 5% 1/16W | |
| R645 | 1-216-815-11 | METAL CHIP 330 5% 1/16W | |
| R646 | 1-216-815-11 | METAL CHIP 330 5% 1/16W | |
| R647 | 1-216-815-11 | METAL CHIP 330 5% 1/16W | |
| R648 | 1-216-815-11 | METAL CHIP 330 5% 1/16W | |
| R649 | 1-216-817-11 | METAL CHIP 470 5% 1/16W | |
| R650 | 1-216-817-11 | METAL CHIP 470 5% 1/16W | |
| R651 | 1-216-817-11 | METAL CHIP 470 5% 1/16W | |
| R652 | 1-216-817-11 | METAL CHIP 470 5% 1/16W | |
| R657 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R658 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R659 | 1-216-809-11 | METAL CHIP 100 5% 1/16W | |
| R660 | 1-216-815-11 | METAL CHIP 330 5% 1/16W | |
| R661 | 1-216-815-11 | METAL CHIP 330 5% 1/16W | |

## DSP | FRONT AMP

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R662 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R663 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R664 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R665 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R666 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R667 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R668 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R669 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R670 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R671 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R672 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R673 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R674 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R675 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R676 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R677 | 1-216-830-11 | METAL CHIP | 5.6K | 5% | 1/16W |
| R678 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R679 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R680 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R681 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R682 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R683 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R684 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R685 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R686 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R687 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R688 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R689 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R690 | 1-216-857-11 | METAL CHIP | 1M | 5% | 1/16W |
| R691 | 1-216-815-11 | METAL CHIP | 330 | 5% | 1/16W |
| R692 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R693 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R694 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R695 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R696 | 1-216-823-11 | METAL CHIP | 1.5K | 5% | 1/16W |
| R697 | 1-216-823-11 | METAL CHIP | 1.5K | 5% | 1/16W |
| R698 | 1-216-852-11 | METAL CHIP | 390K | 5% | 1/16W |
| R699 | 1-216-852-11 | METAL CHIP | 390K | 5% | 1/16W |
| R700 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R701 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R702 | 1-216-857-11 | METAL CHIP | 1M | 5% | 1/16W |
| R703 | 1-216-857-11 | METAL CHIP | 1M | 5% | 1/16W |
| R704 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R705 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R706 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R707 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R708 | 1-216-857-11 | METAL CHIP | 1M | 5% | 1/16W |
| R709 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R711 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R712 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R713 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R715 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R716 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R717 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R719 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R720 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R721 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R723 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R724 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R725 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R727 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R728 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R729 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R730 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R731 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R733 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R734 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R736 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R737 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R740 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/16W |
| R741 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/16W |
| R744 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R745 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R747 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R748 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R749 | 1-216-834-11 | METAL CHIP | 12K | 5% | 1/16W |
| R750 | 1-216-834-11 | METAL CHIP | 12K | 5% | 1/16W |
| R751 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R752 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R753 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R754 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R756 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R757 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R758 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R759 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R760 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R761 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R762 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R763 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R765 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R766 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R767 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R768 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R769 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R770 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R771 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R772 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R773 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R774 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R775 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R776 | 1-216-831-11 | METAL CHIP | 6.8K | 5% | 1/16W |
| R777 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R778 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| | | | | | (AUS,E,E91,EA,MX,SP,MY,TH) |
| R779 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R780 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R781 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| | | < VIBRATOR > | | | |
| X601 | 1-579-993-21 | VIBRATOR, CERAMIC (13.5MHz) | | | |

**********

| | | | | |
|---|---|---|---|---|
| | A-4727-111-A | FRONT AMP BOARD, COMPLETE | | (US,CND) |
| | A-4727-135-A | FRONT AMP BOARD, COMPLETE | | (AEP,UK) |
| | A-4727-161-A | FRONT AMP BOARD, COMPLETE | | (AUS,E91,EA,SP,MY) |
| | A-4727-199-A | FRONT AMP BOARD, COMPLETE | | (E,MX) |
| | A-4727-221-A | FRONT AMP BOARD, COMPLETE | | (TH) |
| | | ********** | | |
| | 7-685-646-79 | SCREW +BVTP | 3X8 | TYPE2 N-S |

# FRONT AMP

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| | | < CAPACITOR > | | | |
| C801 | 1-128-582-11 | ELECT | 10uF | 20% | 100V (US,CND) |
| C801 | 1-126-964-11 | ELECT | 10uF | 20% | 50V (EXCEPT US,CND) |
| C802 | 1-162-292-31 | CERAMIC | 680PF | 10% | 50V |
| C803 | 1-162-286-31 | CERAMIC | 220PF | 10% | 50V (AEP,UK) |
| C803 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V (EXCEPT AEP,UK) |
| C804 | 1-126-967-11 | ELECT | 47uF | 20% | 50V (US,CND) |
| C804 | 1-126-933-11 | ELECT | 100uF | 20% | 16V (EXCEPT US,CND) |
| C805 | 1-102-936-00 | CERAMIC | 3.0PF | 0.25PF | 50V |
| C806 | 1-136-495-11 | FILM | 0.068uF | 5% | 50V |
| C807 | 1-136-495-11 | FILM | 0.068uF | 5% | 50V |
| C808 | 1-128-560-11 | ELECT | 22uF | 20% | 100V |
| C812 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C816 | 1-162-306-11 | CERAMIC | 0.01uF | 30% | 16V |
| C821 | 1-128-562-11 | ELECT | 47uF | 20% | 100V |
| C822 | 1-126-968-11 | ELECT | 100uF | 20% | 50V |
| C831 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C832 | 1-126-382-11 | ELECT | 100uF | 20% | 10V |
| C833 | 1-126-961-11 | ELECT | 2.2uF | 20% | 50V |
| C834 | 1-104-665-11 | ELECT | 100uF | 20% | 10V |
| C851 | 1-128-582-11 | ELECT | 10uF | 20% | 100V (US,CND) |
| C851 | 1-126-964-11 | ELECT | 10uF | 20% | 50V (EXCEPT US,CND) |
| C852 | 1-162-292-31 | CERAMIC | 680PF | 10% | 50V |
| C853 | 1-162-286-31 | CERAMIC | 220PF | 10% | 50V (AEP,UK) |
| C853 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V (EXCEPT AEP,UK) |
| C854 | 1-126-967-11 | ELECT | 47uF | 20% | 50V (US,CND) |
| C854 | 1-126-933-11 | ELECT | 100uF | 20% | 16V (EXCEPT US,CND) |
| C855 | 1-102-936-00 | CERAMIC | 3.0PF | 0.25PF | 50V |
| C856 | 1-136-495-11 | FILM | 0.068uF | 5% | 50V |
| C857 | 1-136-495-11 | FILM | 0.068uF | 5% | 50V |
| C858 | 1-128-560-11 | ELECT | 22uF | 20% | 100V |
| C862 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C871 | 1-137-749-11 | MYLAR | 0.1uF | | 100V |
| C872 | 1-137-749-11 | MYLAR | 0.1uF | | 100V |
| C873 | 1-137-841-11 | ELECT | 2200uF | 20% | 71V (E,MX) |
| C873 | 1-135-928-11 | ELECT | 2200uF | 20% | 63V (US,CND,AEP,UK) |
| C873 | 1-137-847-11 | ELECT | 2200uF | 20% | 71V (AUS,E91,EA,SP,MY,TH) |
| C874 | 1-137-841-11 | ELECT | 2200uF | 20% | 71V (E,MX) |
| C874 | 1-135-928-11 | ELECT | 2200uF | 20% | 63V (US,CND,AEP,UK) |
| C874 | 1-137-847-11 | ELECT | 2200uF | 20% | 71V (AUS,E91,EA,SP,MY,TH) |
| C881 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C882 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C883 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C884 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C885 | 1-162-306-11 | CERAMIC | 0.01uF | 30% | 16V |
| C886 | 1-162-306-11 | CERAMIC | 0.01uF | 30% | 16V |
| C920 | 1-126-956-91 | ELECT | 0.1uF | 20% | 50V |
| C921 | 1-128-582-11 | ELECT | 10uF | 20% | 100V (US,CND) |
| C921 | 1-126-964-11 | ELECT | 10uF | 20% | 50V (EXCEPT US,CND) |
| C922 | 1-126-767-11 | ELECT | 1000uF | 20% | 16V |
| C923 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C924 | 1-126-926-11 | ELECT | 1000uF | 20% | 10V |
| C925 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C926 | 1-126-933-11 | ELECT | 100uF | 20% | 16V |
| | | < CONNECTOR > | | | |
| CN801 | 1-573-829-11 | CONNECTOR, BOARD TO BOARD 15P | | | |
| CN802 | 1-784-031-21 | CONNECTOR, BOARD TO BOARD 8P | | | |
| CN803 | 1-691-769-11 | PLUG (MICRO CONNECTOR) 7P | | | |
| CN804 | 1-691-765-11 | PLUG (MICRO CONNECTOR) 3P | | | |
| | | < DIODE > | | | |
| D801 | 8-719-911-19 | DIODE 1SS119-25 | | | |
| D802 | 8-719-947-65 | DIODE MTZJ-T-72-16B | | | |
| D821 | 8-719-911-19 | DIODE 1SS119-25 | | | |
| D830 | 8-719-911-19 | DIODE 1SS119-25 | | | |
| D831 | 8-719-911-19 | DIODE 1SS119-25 | | | |
| D851 | 8-719-911-19 | DIODE 1SS119-25 | | | |
| D852 | 8-719-947-65 | DIODE MTZJ-T-72-16B | | | |
| D871 | 8-719-510-68 | DIODE D5SBA204101 | | | |
| D881 | 8-719-911-19 | DIODE 1SS119-25 | | | |
| D891 | 8-719-911-19 | DIODE 1SS119-25 | | | |
| D921 | 8-719-050-84 | DIODE RB441Q-40T-77 | | | |
| D922 | 8-719-947-81 | DIODE MTZJ-T-72-24A | | | |
| | | < IC > | | | |
| IC801 | 8-749-017-00 | IC STK412-090 (AEP,UK) | | | |
| IC801 | 8-749-017-01 | IC STK412-020 (EXCEPT AEP,UK) | | | |
| IC921 | 6-701-381-01 | IC UPC24A12AHF | | | |
| IC922 | 8-759-701-59 | IC NJM7809FA | | | |
| IC923 | 8-759-088-08 | IC UPC7812AHF | | | |
| | | < COIL > | | | |
| L881 | 1-420-872-00 | COIL, AIR-CORE | | | |
| L882 | 1-420-872-00 | COIL, AIR-CORE | | | |
| | | < TRANSISTOR > | | | |
| Q801 | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA | | | |
| Q821 | 8-729-140-82 | TRANSISTOR 2SA988-PAFAEA | | | |
| Q822 | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA | | | |
| Q823 | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA | | | |
| Q831 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q832 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q833 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q834 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q835 | 8-729-140-82 | TRANSISTOR 2SA988-PAFAEA | | | |
| Q836 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q837 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q851 | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA | | | |
| Q881 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | | |
| Q882 | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA | | | |
| Q921 | 8-729-209-60 | TRANSISTOR 2SB1375 | | | |
| Q922 | 8-729-900-80 | TRANSISTOR DTC114ES | | | |
| Q923 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q924 | 8-729-900-80 | TRANSISTOR DTC114ES | | | |

# FRONT AMP | HEAD (A) | HEAD (B) | LEAF SW

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| | | < RESISTOR > | | | |
| R801 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R802 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R803 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W F (AEP,UK) |
| R803 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W (US,CND) |
| R803 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W F (AUS,E,E91,EA,MX,SP,MY,TH) |
| R804 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| ⚠R805 | 1-220-755-11 | METAL | 0.22 | 10% | 2W |
| ⚠R806 | 1-220-755-11 | METAL | 0.22 | 10% | 2W |
| R807 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R808 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R809 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R810 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| ⚠R811 | 1-212-881-11 | FUSIBLE | 100 | 5% | 1/4W |
| R812 | 1-260-330-11 | CARBON | 1.5K | 5% | 1/2W |
| R819 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| ⚠R820 | 1-202-972-61 | FUSIBLE | 1 | 5% | 1/4W |
| R821 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R822 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R823 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R824 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R825 | 1-249-439-11 | CARBON | 68K | 5% | 1/4W |
| R826 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R827 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R828 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R830 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R831 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R833 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R834 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R835 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R836 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R837 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R839 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R840 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R851 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R852 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R853 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W F (AEP,UK) |
| R853 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W (US,CND) |
| R853 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W F (AUS,E,E91,EA,MX,SP,MY,TH) |
| R854 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| ⚠R855 | 1-220-755-11 | METAL | 0.22 | 10% | 2W |
| ⚠R856 | 1-220-755-11 | METAL | 0.22 | 10% | 2W |
| R857 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R858 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R859 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R860 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| ⚠R861 | 1-212-881-11 | FUSIBLE | 100 | 5% | 1/4W |
| R862 | 1-260-330-11 | CARBON | 1.5K | 5% | 1/2W |
| R871 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R872 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| ⚠R880 | 1-215-888-00 | METAL OXIDE | 220 | 5% | 2W (US,CND,AEP,UK) |
| ⚠R880 | 1-215-889-00 | METAL OXIDE | 330 | 5% | 2W (AUS,E,E91,EA,MX,SP,MY,TH) |
| R881 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| R882 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| R883 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| R884 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| R885 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R886 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R887 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R888 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R889 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R890 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R921 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R924 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R925 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W F |
| | | < RELAY > | | | |
| RY881 | 1-515-920-11 | RELAY | | | |
| | | < TERMINAL > | | | |
| TM801 | 1-694-677-12 | TERMINAL BOARD (4P) (FRONT SPEAKER) | | | |
| ********** | | | | | |
| | A-2007-839-A | HEAD (A) BOARD, COMPLETE | | | |
| | | ********** | | | |
| | | < CONNECTOR > | | | |
| * CN1 | 1-564-719-11 | PIN, CONNECTOR (SMALL TYPE) 3P | | | |
| ********** | | | | | |
| | A-2007-840-A | HEAD (B) BOARD, COMPLETE | | | |
| | | ********** | | | |
| CN2 | 1-564-722-11 | PIN, CONNECTOR (SMALL TYPE) 6P | | | |
| ********** | | | | | |
| | A-2007-838-A | LEAF SW BOARD, COMPLETE | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C1001 | 1-107-716-11 | ELECT | 33uF | 20% | 10V |
| | | < CONNECTOR > | | | |
| CN1001 | 1-784-459-11 | CONNECTOR, FFC/FPC 17P | | | |
| | | < DIODE > | | | |
| D1001 | 8-719-911-19 | DIODE 1SS119-25 | | | |
| D1002 | 8-719-911-19 | DIODE 1SS119-25 | | | |
| | | < IC > | | | |
| IC1001 | 8-749-016-76 | IC RPI-321 | | | |
| IC1002 | 8-749-016-76 | IC RPI-321 | | | |
| | | < TRANSISTOR > | | | |
| Q1001 | 8-729-029-56 | TRANSISTOR DTA144ESA | | | |
| | | < RESISTOR > | | | |
| R907 | 1-247-879-11 | CARBON | 100K | 5% | 1/4W |
| R1001 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F |
| R1002 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F |
| R1003 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W F |
| R1004 | 1-247-834-11 | CARBON | 1.3K | 5% | 1/4W |

| | |
|---|---|
| The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified. | Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié. |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R1005 | 1-247-818-11 | CARBON | 300 | 5% | 1/4W |
| R1006 | 1-247-864-11 | CARBON | 24K | 5% | 1/4W |
| R1007 | 1-247-780-00 | CARBON | 7.5 | 5% | 1/4W |
| R1008 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| | | < VARIABLE RESISTOR > | | | |
| RV1001 | 1-241-785-11 | RES, ADJ, CARBON 10K (HIGH SPEED) | | | |
| RV1002 | 1-241-785-11 | RES, ADJ, CARBON 10K (NORM SPEED) | | | |
| | | < SWITCH > | | | |
| S1001 | 1-570-953-11 | SWITCH, PUSH (1 KEY) (DECK A PLAY) | | | |
| S1002 | 1-570-953-11 | SWITCH, PUSH (1 KEY) (DECK B PLAY) | | | |
| S1003 | 1-771-333-11 | SWITCH, LEAF (DECK A HALF) | | | |
| S1004 | 1-771-536-12 | SWITCH, LEAF (DECK A 120/70) | | | |
| S1005 | 1-771-536-12 | SWITCH, LEAF (DECK A REC) | | | |
| S1006 | 1-771-333-11 | SWITCH, LEAF (DECK B HALF) | | | |
| S1008 | 1-771-536-12 | SWITCH, LEAF (DECK B 120/ | | | |
| S1009 | 1-771-536-12 | SWITCH, LEAF (DECK B REC) | | | |
| ********** | | | | | |
| | A-4727-119-A | MAIN BOARD, COMPLETE (US,CND) | | | |
| | A-4727-143-A | MAIN BOARD, COMPLETE (AEP,UK) | | | |
| | A-4727-163-A | MAIN BOARD, COMPLETE (AUS,E91,SP,MY) | | | |
| | A-4727-201-A | MAIN BOARD, COMPLETE (E,MX) | | | |
| | A-4727-150-A | MAIN BOARD, COMPLETE (EA) | | | |
| | A-4727-227-A | MAIN BOARD, COMPLETE (TH) | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C1 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C2 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V (AEP,UK) |
| C3 | 1-126-947-11 | ELECT | 47uF | 20% | 16V |
| C4 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C5 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C7 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V (EXCEPT AEP,UK) |
| C11 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C12 | 1-126-947-11 | ELECT | 47uF | 20% | 16V |
| C13 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C14 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C15 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C16 | 1-126-947-11 | ELECT | 47uF | 20% | 16V |
| C17 | 1-126-959-11 | ELECT | 0.47uF | 20% | 50V |
| C18 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C19 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C20 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V (US,CND,AEP,UK) |
| C20 | 1-164-245-11 | CERAMIC CHIP | 0.015uF | 10% | 25V (AUS,E,E91,EA,MX,SP,MY,TH) |
| C21 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V (US,CND,AEP,UK) |
| C21 | 1-164-245-11 | CERAMIC CHIP | 0.015uF | 10% | 25V (AUS,E,E91,EA,MX,SP,MY,TH) |
| C22 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C23 | 1-164-360-11 | CERAMIC CHIP | 0.1uF | | 16V |
| C24 | 1-126-963-11 | ELECT | 4.7uF | 20% | 50V |
| C25 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C26 | 1-162-959-11 | CERAMIC CHIP | 330PF | 5% | 50V (AEP,UK) |
| C26 | 1-164-471-11 | CERAMIC CHIP | 680PF | 5% | 50V (EXCEPT AEP,UK) |
| C27 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C28 | 1-126-963-11 | ELECT | 4.7uF | 20% | 50V |
| C29 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C30 | 1-126-962-11 | ELECT | 3.3uF | 20% | 50V |
| C31 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C32 | 1-126-963-11 | ELECT | 4.7uF | 20% | 50V |
| C34 | 1-162-967-11 | CERAMIC CHIP | 0.0033uF | 10% | 50V |
| C35 | 1-126-947-11 | ELECT | 47uF | 20% | 16V |
| C36 | 1-126-963-11 | ELECT | 4.7uF | 20% | 50V |
| C38 | 1-162-967-11 | CERAMIC CHIP | 0.0033uF | 10% | 50V |
| C39 | 1-164-361-11 | CERAMIC CHIP | 0.047uF | | 16V |
| C40 | 1-164-361-11 | CERAMIC CHIP | 0.047uF | | 16V |
| C41 | 1-164-227-11 | CERAMIC CHIP | 0.022uF | 10% | 25V |
| C42 | 1-162-940-11 | CERAMIC CHIP | 9PF | 0.5PF | 50V |
| C43 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C46 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C48 | 1-162-947-11 | CERAMIC CHIP | 33PF | 5% | 50V (AEP,UK) |
| C49 | 1-162-947-11 | CERAMIC CHIP | 33PF | 5% | 50V (AEP,UK) |
| C51 | 1-162-920-11 | CERAMIC CHIP | 27PF | 5% | 50V |
| C52 | 1-162-920-11 | CERAMIC CHIP | 27PF | 5% | 50V |
| C53 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C56 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C57 | 1-126-947-11 | ELECT | 47uF | 20% | 16V |
| C58 | 1-126-961-11 | ELECT | 2.2uF | 20% | 50V |
| C59 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C60 | 1-126-947-11 | ELECT | 47uF | 20% | 16V |
| C61 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C62 | 1-126-959-11 | ELECT | 0.47uF | 20% | 50V |
| C63 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C69 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C81 | 1-164-363-11 | CERAMIC CHIP | 560PF | 5% | 50V (AEP,UK) |
| C82 | 1-162-959-11 | CERAMIC CHIP | 330PF | 5% | 50V (AEP,UK) |
| C83 | 1-126-964-11 | ELECT | 10uF | 20% | 50V (AEP,UK) |
| C84 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V (AEP,UK) |
| C85 | 1-126-961-11 | ELECT | 2.2uF | 20% | 50V (AEP,UK) |
| C86 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V (AEP,UK) |
| C87 | 1-164-363-11 | CERAMIC CHIP | 560PF | 5% | 50V (AEP,UK) |
| C88 | 1-126-961-11 | ELECT | 2.2uF | 20% | 50V (AEP,UK) |
| C89 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V (AEP,UK) |
| C90 | 1-162-924-11 | CERAMIC CHIP | 56PF | 5% | 50V (AEP,UK) |
| C91 | 1-162-924-11 | CERAMIC CHIP | 56PF | 5% | 50V (AEP,UK) |
| C92 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V (AEP,UK) |
| C105 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C111 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C112 | 1-126-963-11 | ELECT | 4.7uF | 20% | 50V |
| C113 | 1-126-965-91 | ELECT | 22uF | 20% | 50V |
| C114 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C121 | 1-107-721-11 | ELECT | 4.7uF | 20% | 100V |
| C141 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C143 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C155 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |

## MAIN

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| C171 | 1-107-721-11 | ELECT | 4.7uF | 20% | 100V |
| C271 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C272 | 1-126-916-11 | ELECT | 1000uF | 20% | 6.3V |
| C273 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C274 | 1-126-916-11 | ELECT | 1000uF | 20% | 6.3V |
| C275 | 1-126-935-11 | ELECT | 470uF | 20% | 10V |
| C276 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C277 | 1-126-767-11 | ELECT | 1000uF | 20% | 16V |
| C301 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C302 | 1-130-479-00 | MYLAR | 0.0047uF | 5% | 50V |
| C303 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C304 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C305 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C306 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C307 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C308 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C309 | 1-137-194-81 | FILM | 0.47uF | 5% | 50V |
| C310 | 1-162-962-11 | CERAMIC CHIP | 470PF | 10% | 50V |
| C311 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C312 | 1-126-959-11 | ELECT | 0.47uF | 20% | 50V |
| C313 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C314 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C315 | 1-126-963-11 | ELECT | 4.7uF | 20% | 50V |
| C316 | 1-126-933-11 | ELECT | 100uF | 20% | 16V |
| C317 | 1-104-665-11 | ELECT | 100uF | 20% | 10V |
| C318 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C319 | 1-126-961-11 | ELECT | 2.2uF | 20% | 50V |
| C320 | 1-126-961-11 | ELECT | 2.2uF | 20% | 50V |
| C321 | 1-164-392-11 | CERAMIC CHIP | 390PF | 10% | 50V |
| C322 | 1-162-953-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C323 | 1-130-487-00 | MYLAR | 0.022uF | 5% | 50V |
| C324 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C325 | 1-126-965-91 | ELECT | 22uF | 20% | 50V |
| C326 | 1-164-392-11 | CERAMIC CHIP | 390PF | 10% | 50V |
| C327 | 1-104-665-11 | ELECT | 100uF | 20% | 10V |
| C328 | 1-162-953-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C329 | 1-130-483-00 | MYLAR | 0.01uF | 5% | 50V |
| C330 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C331 | 1-126-965-91 | ELECT | 22uF | 20% | 50V |
| C332 | 1-137-427-11 | MYLAR | 120PF | 5% | 50V |
| C333 | 1-162-961-11 | CERAMIC CHIP | 330PF | 10% | 50V |
| C334 | 1-162-920-11 | CERAMIC CHIP | 27PF | 5% | 50V |
| C335 | 1-137-150-11 | MYLAR | 0.01uF | 5% | 100V |
| C336 | 1-126-961-11 | ELECT | 2.2uF | 20% | 50V |
| C337 | 1-130-485-00 | MYLAR | 0.015uF | 5% | 50V |
| C338 | 1-130-481-00 | MYLAR | 0.0068uF | 5% | 50V |
| C339 | 1-130-481-00 | MYLAR | 0.0068uF | 5% | 50V |
| C340 | 1-130-486-00 | MYLAR | 0.018uF | 10% | 50V |
| C341 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C342 | 1-126-947-11 | ELECT | 47uF | 20% | 16V |
| C343 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C351 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C352 | 1-130-479-00 | MYLAR | 0.0047uF | 5% | 50V |
| C353 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C354 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C355 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C356 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C357 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C358 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C359 | 1-137-194-81 | FILM | 0.47uF | 5% | 50V |
| C360 | 1-162-962-11 | CERAMIC CHIP | 470PF | 10% | 50V |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| C362 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C363 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C368 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C369 | 1-126-961-11 | ELECT | 2.2uF | 20% | 50V |
| C370 | 1-126-961-11 | ELECT | 2.2uF | 20% | 50V |
| C371 | 1-164-392-11 | CERAMIC CHIP | 390PF | 10% | 50V |
| C372 | 1-162-953-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C373 | 1-130-487-00 | MYLAR | 0.022uF | 5% | 50V |
| C374 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C375 | 1-126-965-91 | ELECT | 22uF | 20% | 50V |
| C376 | 1-164-392-11 | CERAMIC CHIP | 390PF | 10% | 50V |
| C377 | 1-104-665-11 | ELECT | 100uF | 20% | 10V |
| C378 | 1-162-953-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C379 | 1-130-483-00 | MYLAR | 0.01uF | 5% | 50V |
| C380 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C381 | 1-126-965-91 | ELECT | 22uF | 20% | 50V |
| C382 | 1-137-427-11 | MYLAR | 120PF | 5% | 50V |
| C383 | 1-162-961-11 | CERAMIC CHIP | 330PF | 10% | 50V |
| C384 | 1-162-920-11 | CERAMIC CHIP | 27PF | 5% | 50V |
| C393 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C410 | 1-162-918-11 | CERAMIC CHIP | 18PF | 5% | 50V |
| C411 | 1-162-917-11 | CERAMIC CHIP | 15PF | 5% | 50V |
| C412 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C414 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C416 | 1-126-916-11 | ELECT | 1000uF | 20% | 6.3V |
| C445 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C462 | 1-104-665-11 | ELECT | 100uF | 20% | 10V |
| C464 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C497 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C498 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C499 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C501 | 1-126-964-11 | ELECT | 10uF | 20% | 50V |
| C502 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C503 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V |
| C504 | 1-109-953-11 | ELECT | 2.2uF | 20% | 50V |
| C505 | 1-164-156-11 | CERAMIC CHIP | 0.1uF | | 25V |
| C506 | 1-107-717-11 | ELECT | 47uF | 20% | 50V |
| C511 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C951 | 1-126-955-11 | ELECT | 4700uF | 20% | 35V |
| C952 | 1-130-483-00 | MYLAR | 0.01uF | 5% | 50V |
| C953 | 1-130-483-00 | MYLAR | 0.01uF | 5% | 50V |
| C954 | 1-117-208-11 | ELECT | 22000uF | 20% | 25V |
| C955 | 1-130-483-00 | MYLAR | 0.01uF | 5% | 50V |
| C956 | 1-130-483-00 | MYLAR | 0.01uF | 5% | 50V |
| C961 | 1-126-961-11 | ELECT | 2.2uF | 20% | 50V |
| C971 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C972 | 1-126-935-11 | ELECT | 470uF | 20% | 16V |
| C973 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C974 | 1-126-916-11 | ELECT | 1000uF | 20% | 6.3V |
| C975 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C976 | 1-126-916-11 | ELECT | 1000uF | 20% | 6.3V |
| C977 | 1-162-974-11 | CERAMIC CHIP | 0.01uF | | 50V |
| | | < FILTER > | | | |
| CF1 | 1-795-426-11 | FILTER, CERAMIC (AEP,UK) | | | |
| CF1 | 1-760-233-71 | FILTER, CERAMIC (EXCEPT AEP,UK) | | | |
| CF2 | 1-795-426-11 | FILTER, CERAMIC (AEP,UK) | | | |
| CF2 | 1-760-233-71 | FILTER, CERAMIC (EXCEPT AEP,UK) | | | |
| | | < CONNECTOR > | | | |
| * CN101 | 1-774-876-21 | CONNECTOR, BOARD TO BOARD 8P | | | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| CN102 | 1-573-847-11 | CONNECTOR, BOARD TO BOARD 15P | |
| CN103 | 1-573-847-11 | CONNECTOR, BOARD TO BOARD 15P | |
| * CN104 | 1-564-518-11 | PLUG, CONNECTOR 3P | |
| CN203 | 1-779-549-21 | CONNECTOR,FFC(LIF(NON-ZIF))12P | |
| CN204 | 1-785-320-11 | PIN, CONNECTOR (STRAIGHT) 8P | |
| CN304 | 1-784-778-11 | CONNECTOR, FFC 17P | |
| CN401 | 1-793-766-11 | CONNECTOR, BOARD TO BOARD 30P | |
| CN402 | 1-506-469-11 | PIN, CONNECTOR 4P | |
| CN501 | 1-779-289-11 | CONNECTOR,FFC(LIF(NON-ZIF))21P | |
| CN502 | 1-779-291-11 | CONNECTOR,FFC(LIF(NON-ZIF))23P | |
| | | < DIODE > | |
| D51 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D81 | 8-719-988-61 | DIODE 1SS355TE-17 (AEP,UK) | |
| D111 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D112 | 8-719-056-82 | DIODE UDZ-TE-17-6.2B | |
| D113 | 8-719-056-83 | DIODE UDZ-TE-17-6.8B | |
| D501 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D502 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D503 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D504 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D505 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D506 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D507 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D508 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D509 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D510 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D511 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D950 | 8-719-028-23 | DIODE D3SBA20-4101 | |
| D959 | 8-719-028-23 | DIODE D3SBA20-4101 | |
| D961 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D962 | 8-719-988-61 | DIODE 1SS355TE-17 | |
| D971 | 8-719-200-82 | DIODE 11ES2 | |
| D972 | 8-719-200-82 | DIODE 11ES2 | |
| D973 | 8-719-200-82 | DIODE 11ES2 | |
| D974 | 8-719-200-82 | DIODE 11ES2 | |
| D975 | 8-719-200-82 | DIODE 11ES2 | |
| D981 | 8-719-200-82 | DIODE 11ES2 | |
| D982 | 8-719-200-82 | DIODE 11ES2 | |
| D983 | 8-719-200-82 | DIODE 11ES2 | |
| D984 | 8-719-200-82 | DIODE 11ES2 | |
| | | < FRONT END > | |
| FE2 | 1-693-478-11 | FRONT END (FM3 GANGS) (EXCEPT AEP,UK) | |
| FE3 | 1-693-496-11 | FRONT END (4 GANG) (AEP,UK) | |
| | | < IC > | |
| IC11 | 8-759-828-33 | IC LA1845 | |
| IC51 | 8-759-590-13 | IC LC72131D | |
| IC81 | 8-759-541-48 | IC BU1924 (AEP,UK) | |
| IC301 | 8-759-652-02 | IC HA12226F | |
| IC302 | 8-759-143-54 | IC uPC1330HA | |
| IC303 | 8-759-656-83 | IC NJM4580MD-(TE2) | |
| IC304 | 8-759-656-83 | IC NJM4580MD-(TE2) | |
| IC401 | 6-800-712-01 | IC M30622MGA-A72FP | |
| IC501 | 8-759-635-63 | IC M51943BSL-TP | |
| | | < IFT > | |
| IFT11 | 1-435-848-12 | TRANSFORMER,IF(CERAMIC FILTER) | |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| | | < JUMPER RESISTOR > | | | |
| JR1 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR2 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR3 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR4 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR5 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR6 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W (EXCEPT AEP,UK) |
| JR7 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR8 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR10 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W (EXCEPT AEP,UK) |
| JR11 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W (AEP,UK) |
| JR12 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W (EXCEPT AEP,UK) |
| JR13 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W (AEP,UK) |
| JR14 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W (AEP,UK) |
| JR15 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR19 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W (EXCEPT AEP,UK) |
| JR22 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR24 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR25 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR26 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR27 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR29 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR30 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR31 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR32 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR33 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR34 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR271 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR272 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR273 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR400 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR416 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| JR418 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W (EXCEPT AEP,UK) |
| JR420 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W (EXCEPT AEP,UK) |
| JR462 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| | | < COIL > | | | |
| L41 | 1-412-957-11 | INDUCTOR | 33uH (AEP,UK) | | |
| L81 | 1-412-963-11 | INDUCTOR | 100uH (AEP,UK) | | |
| L301 | 1-410-780-11 | INDUCTOR | 27MH | | |
| L302 | 1-414-193-41 | INDUCTOR | 220uH | | |
| L303 | 1-414-193-41 | INDUCTOR | 220uH | | |
| L351 | 1-410-780-11 | INDUCTOR | 27MH | | |
| L971 | 1-410-478-11 | INDUCTOR | 47uH | | |
| | | < FILTER > | | | |
| LPF11 | 1-234-612-11 | FILTER, LOW PASS | | | |
| LPF12 | 1-234-612-11 | FILTER, LOW PASS | | | |
| | | < TRANSISTOR > | | | |
| Q1 | 8-729-055-80 | TRANSISTOR 2SC1674LK-TP | | | |
| Q2 | 8-729-422-57 | TRANSISTOR UN4111 | | | |
| Q11 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | | | |

## MAIN

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| Q12 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| Q81 | 8-729-620-05 | TRANSISTOR 2SC2603TP-EF (AEP,UK) | |
| Q111 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q112 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q113 | 8-729-026-68 | TRANSISTOR 2SD2525(TP) | |
| Q114 | 8-729-900-36 | TRANSISTOR DTC124ES | |
| Q121 | 8-729-141-30 | TRANSISTOR 2SC3623A-LK | |
| Q141 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q171 | 8-729-141-30 | TRANSISTOR 2SC3623A-LK | |
| Q301 | 8-729-801-93 | TRANSISTOR 2SD1387-3 | |
| Q302 | 8-729-142-46 | TRANSISTOR 2SC2001-LK | |
| Q303 | 8-729-142-46 | TRANSISTOR 2SC2001-LK | |
| Q304 | 8-729-900-63 | TRANSISTOR DTA124ES | |
| Q305 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q391 | 8-729-140-04 | TRANSISTOR 2SB1116A-L | |
| Q392 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q393 | 8-729-140-04 | TRANSISTOR 2SB1116A-L | |
| Q394 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q395 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q396 | 8-729-116-57 | TRANSISTOR 2SB1068-K | |
| Q397 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q501 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q502 | 8-729-900-63 | TRANSISTOR DTA124ES | |
| Q503 | 8-729-900-63 | TRANSISTOR DTA124ES | |
| Q504 | 8-729-900-63 | TRANSISTOR DTA124ES | |
| Q505 | 8-729-900-36 | TRANSISTOR DTC124ES | |
| Q506 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q507 | 8-729-422-57 | TRANSISTOR UN4111 | |

< RESISTOR >

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R1 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R3 | 1-216-805-11 | METAL CHIP | 47 | 5% | 1/16W |
| R4 | 1-216-805-11 | METAL CHIP | 47 | 5% | 1/16W |
| R5 | 1-216-819-11 | METAL CHIP | 680 | 5% | 1/16W |
| R6 | 1-216-815-11 | METAL CHIP | 330 | 5% | 1/16W |
| R7 | 1-216-819-11 | METAL CHIP | 680 | 5% | 1/16W |
| R8 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R10 | 1-216-814-11 | METAL CHIP | 270 | 5% | 1/16W |
| R12 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R13 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R14 | 1-216-814-11 | METAL CHIP | 270 | 5% | 1/16W |
| R15 | 1-216-843-11 | METAL CHIP | 68K | 5% | 1/16W |
| R16 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R17 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R18 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R19 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R20 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R21 | 1-216-819-11 | METAL CHIP | 680 | 5% | 1/16W (AEP,UK) |
| R21 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W (EXCEPT AEP,UK) |
| R22 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R23 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R24 | 1-216-819-11 | METAL CHIP | 680 | 5% | 1/16W (AEP,UK) |
| R24 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W (EXCEPT AEP,UK) |
| R25 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R26 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R27 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R28 | 1-216-849-11 | METAL CHIP | 220K | 5% | 1/16W |
| R29 | 1-216-849-11 | METAL CHIP | 220K | 5% | 1/16W |
| R30 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R31 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R41 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R42 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R43 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R55 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R56 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R58 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R59 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R60 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R61 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R62 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R63 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R64 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R65 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R66 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R67 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R68 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R69 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R81 | 1-216-851-11 | METAL CHIP | 330K | 5% | 1/16W (AEP,UK) |
| R83 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W (AEP,UK) |
| R84 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W (AEP,UK) |
| R85 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W (AEP,UK) |
| R86 | 1-216-805-11 | METAL CHIP | 47 | 5% | 1/16W (AEP,UK) |
| R87 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W (AEP,UK) |
| R88 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W (AEP,UK) |
| R111 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R112 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R113 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R114 | 1-216-849-11 | METAL CHIP | 220K | 5% | 1/16W |
| R115 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| ⚠R121 | 1-215-891-11 | METAL OXIDE | 680 | 5% | 2W |
| R122 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R124 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R141 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R142 | 1-216-822-11 | METAL CHIP | 1.2K | 5% | 1/16W |
| R143 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| ⚠R171 | 1-215-891-11 | METAL OXIDE | 680 | 5% | 2W |
| R172 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R174 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R175 | 1-216-826-11 | METAL CHIP | 2.7K | 5% | 1/16W |
| R301 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R302 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R303 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R304 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R305 | 1-216-831-11 | METAL CHIP | 6.8K | 5% | 1/16W |
| R306 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R307 | 1-216-832-11 | METAL CHIP | 8.2K | 5% | 1/16W |
| R308 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R309 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R311 | 1-216-857-11 | METAL CHIP | 1M | 5% | 1/16W |
| R312 | 1-218-745-11 | RES-CHIP | 160K | 5% | 1/16W |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R313 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R315 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R316 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R317 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R318 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R319 | 1-216-852-11 | METAL CHIP | 390K | 5% | 1/16W |
| R320 | 1-216-822-11 | METAL CHIP | 1.2K | 5% | 1/16W |
| R321 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R331 | 1-216-846-11 | METAL CHIP | 120K | 5% | 1/16W |
| R332 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R333 | 1-216-830-11 | METAL CHIP | 5.6K | 5% | 1/16W |
| R334 | 1-218-332-11 | RES-CHIP | 130K | 5% | 1/16W |
| R335 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R336 | 1-216-846-11 | METAL CHIP | 120K | 5% | 1/16W |
| R337 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R338 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R339 | 1-216-834-11 | METAL CHIP | 12K | 5% | 1/16W |
| R340 | 1-216-850-11 | METAL CHIP | 270K | 5% | 1/16W |
| R341 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R342 | 1-216-834-11 | METAL CHIP | 12K | 5% | 1/16W |
| ⚠R343 | 1-219-787-17 | FUSIBLE | 5.6 | 5% | 1/4W |
| ⚠R344 | 1-219-787-17 | FUSIBLE | 5.6 | 5% | 1/4W |
| R345 | 1-216-836-11 | METAL CHIP | 18K | 5% | 1/16W |
| R346 | 1-216-836-11 | METAL CHIP | 18K | 5% | 1/16W |
| R347 | 1-216-830-11 | METAL CHIP | 5.6K | 5% | 1/16W |
| R348 | 1-216-820-11 | METAL CHIP | 820 | 5% | 1/16W |
| R349 | 1-216-823-11 | METAL CHIP | 1.5K | 5% | 1/16W |
| R351 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R352 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R353 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R354 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R355 | 1-216-831-11 | METAL CHIP | 6.8K | 5% | 1/16W |
| R356 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R357 | 1-216-832-11 | METAL CHIP | 8.2K | 5% | 1/16W |
| R358 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R359 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R360 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R361 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R362 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R363 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R364 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R365 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R366 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R367 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R368 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R369 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R371 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R372 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R373 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R374 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R375 | 1-218-296-11 | RES-CHIP | 75K | 5% | 1/16W |
| R376 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R377 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R378 | 1-218-296-11 | RES-CHIP | 75K | 5% | 1/16W |
| R381 | 1-216-846-11 | METAL CHIP | 120K | 5% | 1/16W |
| R382 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R383 | 1-216-830-11 | METAL CHIP | 5.6K | 5% | 1/16W |
| R384 | 1-218-332-11 | RES-CHIP | 130K | 5% | 1/16W |
| R385 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R386 | 1-216-846-11 | METAL CHIP | 120K | 5% | 1/16W |
| R387 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R388 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R389 | 1-216-834-11 | METAL CHIP | 12K | 5% | 1/16W |
| R390 | 1-216-850-11 | METAL CHIP | 270K | 5% | 1/16W |
| R391 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R392 | 1-216-834-11 | METAL CHIP | 12K | 5% | 1/16W |
| R393 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R394 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R396 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R397 | 1-216-820-11 | METAL CHIP | 820 | 5% | 1/16W |
| R398 | 1-216-823-11 | METAL CHIP | 1.5K | 5% | 1/16W |
| R400 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R401 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R402 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R403 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R404 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R405 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R406 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R407 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R409 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R410 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R411 | 1-216-851-11 | METAL CHIP | 330K | 5% | 1/16W |
| R413 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R417 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R419 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R421 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R422 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R423 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R429 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R430 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R431 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R435 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R436 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R437 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R438 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R439 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R440 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R441 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R442 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R443 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R447 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R448 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R449 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R450 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R451 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R453 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R456 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R457 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R468 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R469 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R470 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R471 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R472 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R473 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R474 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R475 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R476 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R477 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R478 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R479 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R480 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R481 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

## MAIN MB

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R482 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R483 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R484 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R485 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R486 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R487 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R488 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R489 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R490 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R491 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R492 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R493 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W (AEP,UK) |
| R493 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W (EA) |
| R493 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W (US,CND) |
| R493 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W (E,MX) |
| R495 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R496 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R497 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R498 | 1-216-823-11 | METAL CHIP | 1.5K | 5% | 1/16W |
| R499 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W (US,CND,E,MX) |
| R499 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W (EA) |
| R499 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W (AUS,E91,SP,MY,TH) |
| R501 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R502 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R503 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R504 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R505 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R506 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R507 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R508 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R509 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R510 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R511 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R512 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R514 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R546 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R547 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R961 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R962 | 1-216-837-11 | METAL CHIP | 22K | 5% | 1/16W |
| R963 | 1-216-831-11 | METAL CHIP | 6.8K | 5% | 1/16W |
| | | < COMPOSITION CIRCUIT BLOCK > | | | |
| RB41 | 1-234-575-11 | ENCAPSULATED COMPONENT | | | |
| | | < VARIABLE RESISTOR > | | | |
| RV11 | 1-241-765-11 | RES, ADJ, CARBON 22K (FM TUNED LEVEL) | | | |
| RV301 | 1-241-764-11 | RES, ADJ, CARBON 10K (REC LEVEL (L) DECK (B)) | | | |
| RV302 | 1-241-762-11 | RES, ADJ, CARBON 2.2K (PB LEVEL (L) DECK (A)) | | | |
| RV303 | 1-241-762-11 | RES, ADJ, CARBON 2.2K (PB LEVEL (L) DECK (B)) | | | |
| RV304 | 1-241-768-11 | RES, ADJ, CARBON 220K (REC BIAS (L)) | | | |
| RV351 | 1-241-764-11 | RES, ADJ, CARBON 10K (REC LEVEL (R) DECK (B)) | | | |
| RV354 | 1-241-768-11 | RES, ADJ, CARBON 220K (REC BIAS (R)) | | | |
| | | < TRANSFORMER > | | | |
| T11 | 1-435-792-11 | TRANSFORMER, DISCRIMINATOR | | | |
| T301 | 1-423-980-11 | TRANSFORMER, BIAS OSCILLATION | | | |
| | | < TERMINAL > | | | |
| TM1 | 1-694-556-22 | TERMINAL BOARD (ANT.PAL) (AEP,UK) | | | |
| TM1 | 1-694-555-22 | TERMINAL BOARD (4P) (EXCEPT AEP,UK) | | | |
| | | < VIBRATOR > | | | |
| X51 | 1-760-549-31 | VIBRATOR, CRYSTAL (4.5MHz) | | | |
| X81 | 1-579-900-21 | VIBRATOR, CRYSTAL (4.332MHz) (AEP,UK) | | | |
| X401 | 1-567-098-41 | VIBRATOR, CRYSTAL (32.768kHz) | | | |
| X402 | 1-781-107-21 | VIBRATOR, SERAMIC (16MHz) | | | |
| ********** | | | | | |
| | A-4727-088-A | MB BOARD, COMPLETE (TH) | | | |
| | A-4727-126-A | MB BOARD, COMPLETE (US,CND) | | | |
| | A-4727-147-A | MB BOARD, COMPLETE (AEP,UK) | | | |
| | A-4727-152-A | MB BOARD, COMPLETE (EA) | | | |
| | A-4727-167-A | MB BOARD, COMPLETE (SP,MY) | | | |
| | A-4727-172-A | MB BOARD, COMPLETE (AUS) | | | |
| | A-4727-203-A | MB BOARD, COMPLETE (E,MX) | | | |
| | A-4727-272-A | MB BOARD, COMPLETE (E91) | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C004 | 1-126-204-11 | ELECT CHIP | 47uF | 20% | 16V |
| C005 | 1-126-246-11 | ELECT CHIP | 220uF | 20% | 4V |
| C006 | 1-126-204-11 | ELECT CHIP | 47uF | 20% | 16V |
| C007 | 1-162-915-11 | CERAMIC CHIP | 10PF | 0.5PF | 50V |
| C018 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C019 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C103 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C104 | 1-126-209-11 | ELECT CHIP | 100uF | 20% | 4V |
| C105 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C106 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C107 | 1-162-915-11 | CERAMIC CHIP | 10PF | 0.5PF | 50V |
| C108 | 1-162-917-11 | CERAMIC CHIP | 15PF | 5% | 50V |
| C109 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C110 | 1-126-209-11 | ELECT CHIP | 100uF | 20% | 4V |
| C111 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C112 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C113 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C114 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C116 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C119 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C124 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C202 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C203 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C204 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C205 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C206 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C207 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C301 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C304 | 1-126-246-11 | ELECT CHIP | 220uF | 20% | 4V |
| C305 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C306 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C307 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C309 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C310 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C311 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| C312 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C313 | 1-164-677-11 | CERAMIC CHIP | 0.033uF | 10% | 16V |
| C315 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C317 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C318 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C319 | 1-110-563-11 | CERAMIC CHIP | 0.068uF | 10% | 16V |
| C320 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C321 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C322 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C323 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C324 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C325 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C326 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C327 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C328 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C331 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C332 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C333 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C334 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C335 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C336 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C337 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C338 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C339 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C340 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C341 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C342 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C343 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C344 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C345 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C346 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C347 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C348 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C349 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C350 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C351 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C352 | 1-126-204-11 | ELECT CHIP | 47uF | 20% | 16V |
| C401 | 1-164-245-11 | CERAMIC CHIP | 0.015uF | 10% | 25V |
| C402 | 1-162-960-11 | CERAMIC CHIP | 220PF | 10% | 50V |
| C403 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C404 | 1-162-965-11 | CERAMIC CHIP | 0.0015uF | 10% | 50V |
| C405 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C406 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C407 | 1-162-960-11 | CERAMIC CHIP | 220PF | 10% | 50V |
| C408 | 1-162-927-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C411 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C412 | 1-164-677-11 | CERAMIC CHIP | 0.033uF | 10% | 16V |
| C413 | 1-164-677-11 | CERAMIC CHIP | 0.033uF | 10% | 16V |
| C414 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C415 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C416 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C417 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C418 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C419 | 1-126-204-11 | ELECT CHIP | 47uF | 20% | 16V |
| C420 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C429 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C430 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C501 | 1-126-193-11 | ELECT | 1uF | 20% | 50V |
| C502 | 1-117-370-11 | CERAMIC CHIP | 10uF | | 10V |
| C503 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C504 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C505 | 1-117-370-11 | CERAMIC CHIP | 10uF | | 10V |
| C506 | 1-117-370-11 | CERAMIC CHIP | 10uF | | 10V |
| C508 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C509 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C510 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C511 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C512 | 1-126-246-11 | ELECT CHIP | 220uF | 20% | 4V |
| C513 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C514 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C516 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C518 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C519 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C520 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C521 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C522 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C523 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C524 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C525 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C526 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C529 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C530 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C531 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C532 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C533 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C534 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C535 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C536 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C537 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C538 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C539 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C540 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C541 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C542 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C545 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C546 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C547 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C701 | 1-126-206-11 | ELECT CHIP | 100uF | 20% | 6.3V |
| C702 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C711 | 1-162-918-11 | CERAMIC CHIP | 18PF | 5% | 50V |
| C712 | 1-162-921-11 | CERAMIC CHIP | 33PF | 5% | 50V |
| C716 | 1-162-918-11 | CERAMIC CHIP | 18PF | 5% | 50V |
| C717 | 1-162-921-11 | CERAMIC CHIP | 33PF | 5% | 50V |
| C721 | 1-162-918-11 | CERAMIC CHIP | 18PF | 5% | 50V |
| C722 | 1-162-921-11 | CERAMIC CHIP | 33PF | 5% | 50V |
| C741 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C742 | 1-126-206-11 | ELECT CHIP | 100uF | 20% | 6.3V |
| C743 | 1-124-778-00 | ELECT CHIP | 22uF | 20% | 6.3V |
| C744 | 1-126-206-11 | ELECT CHIP | 100uF | 20% | 6.3V |
| C745 | 1-124-778-00 | ELECT CHIP | 22uF | 20% | 6.3V |
| C764 | 1-126-193-11 | ELECT | 1uF | 20% | 50V |
| C765 | 1-126-193-11 | ELECT | 1uF | 20% | 50V |
| C766 | 1-126-193-11 | ELECT | 1uF | 20% | 50V |

< CONNECTOR >

| Ref. No. | Part No. | Description |
|---|---|---|
| CN008 | 1-779-992-11 | PIN, CONNECTOR (PWB) 8P |
| CN009 | 1-784-135-11 | CONNECTOR (FFC) 9P |
| CN010 | 1-784-146-11 | CONNECTOR (FFC) 25P |
| * CN011 | 1-778-867-11 | CONNECTOR, FFC/FPC 6P |
| CN101 | 1-784-371-21 | CONNECTOR, FFC/FPC 12P |
| CN103 | 1-793-687-11 | PIN, CONNECTOR (1.5MM) (SMD)5P |
| CN202 | 1-766-382-21 | PIN, CONNECTOR (1.5MM)(SMD)10P |

## MB

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| CN404 | 1-793-687-11 | PIN, CONNECTOR (1.5MM) (SMD)5P | | | |
| | | < FERRITE BEAD > | | | |
| FB007 | 1-469-324-21 | FERRITE | 0UH | | |
| FB008 | 1-469-324-21 | FERRITE | 0UH | | |
| FB009 | 1-469-324-21 | FERRITE | 0UH | | |
| FB010 | 1-469-324-21 | FERRITE | 0UH | | |
| FB011 | 1-469-324-21 | FERRITE | 0UH | | |
| FB012 | 1-469-324-21 | FERRITE | 0UH | | |
| FB112 | 1-216-864-11 | METAL CHIP | 0 | 5% 1/16W | |
| FB711 | 1-216-864-11 | METAL CHIP | 0 | 5% 1/16W | |
| FB712 | 1-216-864-11 | METAL CHIP | 0 | 5% 1/16W | |
| FB714 | 1-216-864-11 | METAL CHIP | 0 | 5% 1/16W | |
| | | < FILTER > | | | |
| FL003 | 1-234-177-21 | FILTER, CHIP EMI | | | |
| FL004 | 1-234-177-21 | FILTER, CHIP EMI | | | |
| FL005 | 1-233-893-21 | FILTER, CHIP EMI | | | |
| FL101 | 1-233-893-21 | FILTER, CHIP EMI | | | |
| FL102 | 1-233-893-21 | FILTER, CHIP EMI | | | |
| FL103 | 1-233-893-21 | FILTER, CHIP EMI | | | |
| FL202 | 1-233-893-21 | FILTER, CHIP EMI | | | |
| FL203 | 1-233-893-21 | FILTER, CHIP EMI | | | |
| FL204 | 1-234-177-21 | FILTER, CHIP EMI | | | |
| FL501 | 1-233-893-21 | FILTER, CHIP EMI | | | |
| FL502 | 1-233-893-21 | FILTER, CHIP EMI | | | |
| FL505 | 1-234-177-21 | FILTER, CHIP EMI | | | |
| | | < IC > | | | |
| IC006 | 6-700-398-01 | IC uPC2918T-E1 | | | |
| IC101 | 8-759-640-41 | IC BR24C08F-E2 | | | |
| IC102 | 8-759-831-81 | IC IMIC6001BTD | | | |
| IC103 | 8-759-829-75 | IC MB91307APFV-G-BND-E1 | | | |
| IC106 | 8-759-645-76 | IC TC74VHCT32AFT | | | |
| IC107 | 8-759-826-41 | IC MBM29DL324BE-90PFTN | | | |
| IC202 | 6-700-740-01 | IC LC22004A-RJ6-TBM-E | | | |
| IC301 | 8-759-599-45 | IC MM1385ENLE | | | |
| IC302 | 8-759-828-01 | IC CXD9635R | | | |
| IC303 | 8-759-683-75 | IC MSM51V8160F-60TSKR1 | | | |
| IC401 | 8-759-826-42 | IC FAN8034 | | | |
| IC501 | 8-759-832-30 | IC TK71518ASCL | | | |
| IC502 | 8-759-599-45 | IC MM1385ENLE | | | |
| IC503 | 8-752-399-55 | IC CXD1932Q | | | |
| IC504 | 8-759-663-74 | IC HY57V161610DTC-7TR | | | |
| IC505 | 8-759-663-74 | IC HY57V161610DTC-7TR | | | |
| IC701 | 8-759-680-28 | IC BA7666FS-E2 | | | |
| | | < COIL > | | | |
| L701 | 1-412-788-41 | INDUCTOR | 10uH | | |
| L711 | 1-412-790-31 | INDUCTOR | 15uH | | |
| L713 | 1-412-790-31 | INDUCTOR | 15uH | | |
| L715 | 1-412-790-31 | INDUCTOR | 15uH | | |
| | | < TRANSISTOR > | | | |
| Q711 | 8-729-027-23 | TRANSISTOR DTA114EKA-T146 | | | |
| Q712 | 1-801-806-11 | TRANSISTOR DTC144EKA | | | |
| | | < RESISTOR > | | | |
| R017 | 1-216-864-11 | METAL CHIP | 0 | 5% 1/16W | |
| R021 | 1-216-864-11 | METAL CHIP | 0 | 5% 1/16W | |
| R076 | 1-216-837-11 | METAL CHIP | 22K | 5% 1/10W (TYPE A) | |
| R077 | 1-216-815-11 | METAL CHIP | 330 | 5% 1/10W (TYPE A) | |
| R077 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/10W (TYPE B) | |
| R078 | 1-216-827-11 | METAL CHIP | 3.3K | 5% 1/10W | |
| R079 | 1-216-801-11 | METAL CHIP | 22 | 5% 1/10W (TYPE A) | |
| R079 | 1-216-845-11 | METAL CHIP | 100K | 5% 1/10W (TYPE B) | |
| R101 | 1-216-789-11 | METAL CHIP | 2.2 | 5% 1/16W | |
| R105 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R107 | 1-216-821-11 | METAL CHIP | 1K | 5% 1/16W | |
| R109 | 1-216-797-11 | METAL CHIP | 10 | 5% 1/16W | |
| R111 | 1-216-817-11 | METAL CHIP | 470 | 5% 1/16W | |
| R112 | 1-216-821-11 | METAL CHIP | 1K | 5% 1/16W | |
| R113 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R114 | 1-216-845-11 | METAL CHIP | 100K | 5% 1/16W | |
| R116 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R117 | 1-216-821-11 | METAL CHIP | 1K | 5% 1/16W | |
| R118 | 1-216-821-11 | METAL CHIP | 1K | 5% 1/16W | |
| R119 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R121 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R123 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R124 | 1-216-797-11 | METAL CHIP | 10 | 5% 1/16W | |
| R125 | 1-216-797-11 | METAL CHIP | 10 | 5% 1/16W | |
| R126 | 1-216-797-11 | METAL CHIP | 10 | 5% 1/16W | |
| R128 | 1-216-827-11 | METAL CHIP | 3.3K | 5% 1/16W | |
| R129 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R130 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R131 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R132 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R133 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R134 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R136 | 1-216-797-11 | METAL CHIP | 10 | 5% 1/16W | |
| R137 | 1-216-797-11 | METAL CHIP | 10 | 5% 1/16W | |
| R138 | 1-216-797-11 | METAL CHIP | 10 | 5% 1/16W | |
| R140 | 1-216-797-11 | METAL CHIP | 10 | 5% 1/16W | |
| R141 | 1-216-797-11 | METAL CHIP | 10 | 5% 1/16W | |
| R142 | 1-216-797-11 | METAL CHIP | 10 | 5% 1/16W | |
| R143 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R145 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R146 | 1-216-833-11 | METAL CHIP | 10K | 5% 1/16W | |
| R147 | 1-216-825-11 | METAL CHIP | 2.2K | 5% 1/16W | |
| R149 | 1-216-829-11 | METAL CHIP | 4.7K | 5% 1/16W | |
| R150 | 1-216-839-11 | METAL CHIP | 33K | 5% 1/16W (E,MX) | |
| R150 | 1-216-835-11 | METAL CHIP | 15K | 5% 1/16W (AEP,UK) | |
| R150 | 1-216-831-11 | METAL CHIP | 6.8K | 5% 1/16W (SP,MY,TH) | |
| R150 | 1-216-829-11 | METAL CHIP | 4.7K | 5% 1/16W (E91) | |
| R150 | 1-216-821-11 | METAL CHIP | 1K | 5% 1/16W (EA) | |
| R150 | 1-216-827-11 | METAL CHIP | 3.3K | 5% 1/16W (AUS) | |
| R151 | 1-216-829-11 | METAL CHIP | 4.7K | 5% 1/16W | |
| R152 | 1-216-839-11 | METAL CHIP | 33K | 5% 1/16W (TH) | |
| R152 | 1-216-835-11 | METAL CHIP | 15K | 5% 1/16W (EXCEPT TH) | |
| R153 | 1-216-829-11 | METAL CHIP | 4.7K | 5% 1/16W | |
| R154 | 1-216-843-11 | METAL CHIP | 68K | 5% 1/16W (AEP,EA,UK) | |
| R154 | 1-216-839-11 | METAL CHIP | 33K | 5% 1/16W (SP,MY,TH) | |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R154 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W (E91) |
| R154 | 1-216-835-11 | METAL CHIP | 15K | 5% | 1/16W (AUS,E,MX) |
| R155 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R156 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R157 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R160 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R161 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R162 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R164 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R165 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R166 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R167 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R168 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R170 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R172 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R174 | 1-216-797-11 | METAL CHIP | 10 | 5% | 1/16W |
| R175 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R179 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R182 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R183 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R184 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R185 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R186 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R187 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R188 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R191 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R192 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R199 | 1-216-826-11 | METAL CHIP | 2.7K | 5% | 1/16W |
| R202 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R204 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R205 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R206 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R207 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R211 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R212 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R214 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R215 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R299 | 1-216-847-11 | METAL CHIP | 150K | 5% | 1/16W |
| R301 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R302 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |
| R305 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R306 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R307 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R308 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R309 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R310 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R311 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R312 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R313 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R314 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R315 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R316 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R317 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R318 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R319 | 1-216-831-11 | METAL CHIP | 6.8K | 5% | 1/16W |
| R320 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R321 | 1-216-817-11 | METAL CHIP | 470 | 5% | 1/16W |
| R328 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R329 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R330 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R332 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R334 | 1-218-871-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R335 | 1-218-855-11 | METAL CHIP | 2.2K | 0.5% | 1/10W |
| R336 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R337 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R338 | 1-218-879-11 | METAL CHIP | 22K | 0.5% | 1/10W |
| R341 | 1-218-871-11 | METAL CHIP | 10K | 0.5% | 1/10W |
| R342 | 1-218-883-11 | METAL CHIP | 33K | 0.5% | 1/10W |
| R343 | 1-218-831-11 | METAL CHIP | 220 | 0.5% | 1/10W |
| R344 | 1-218-847-11 | METAL CHIP | 1K | 0.5% | 1/10W |
| R345 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R349 | 1-216-838-11 | METAL CHIP | 27K | 5% | 1/16W |
| R350 | 1-216-822-11 | METAL CHIP | 1.2K | 5% | 1/16W |
| R351 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R352 | 1-216-825-11 | METAL CHIP | 2.2K | 5% | 1/16W |
| R356 | 1-218-853-11 | METAL CHIP | 1.8K | 0.5% | 1/10W |
| R368 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R384 | 1-216-797-11 | METAL CHIP | 10 | 5% | 1/16W |
| R385 | 1-216-829-11 | METAL CHIP | 4.7K | 5% | 1/16W |
| R406 | 1-216-846-11 | METAL CHIP | 120K | 5% | 1/16W |
| R407 | 1-216-846-11 | METAL CHIP | 120K | 5% | 1/16W |
| R408 | 1-216-847-11 | METAL CHIP | 150K | 5% | 1/16W |
| R409 | 1-216-847-11 | METAL CHIP | 150K | 5% | 1/16W |
| R410 | 1-216-842-11 | METAL CHIP | 56K | 5% | 1/16W |
| R411 | 1-216-842-11 | METAL CHIP | 56K | 5% | 1/16W |
| R412 | 1-216-850-11 | METAL CHIP | 270K | 5% | 1/16W |
| R413 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R414 | 1-216-853-11 | METAL CHIP | 470K | 5% | 1/16W |
| R415 | 1-216-846-11 | METAL CHIP | 120K | 5% | 1/16W |
| R416 | 1-216-855-11 | METAL CHIP | 680K | 5% | 1/16W |
| R417 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R418 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R419 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R420 | 1-216-853-11 | METAL CHIP | 470K | 5% | 1/16W |
| R421 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R422 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R423 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R424 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R425 | 1-216-849-11 | METAL CHIP | 220K | 5% | 1/16W |
| R426 | 1-216-853-11 | METAL CHIP | 470K | 5% | 1/16W |
| R427 | 1-218-895-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R428 | 1-216-839-11 | METAL CHIP | 33K | 5% | 1/16W |
| R429 | 1-218-889-11 | METAL CHIP | 56K | 0.5% | 1/10W |
| R430 | 1-218-895-11 | METAL CHIP | 100K | 0.5% | 1/10W |
| R431 | 1-218-889-11 | METAL CHIP | 56K | 0.5% | 1/10W |
| R432 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R433 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R434 | 1-216-815-11 | METAL CHIP | 330 | 5% | 1/16W |
| R435 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R439 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R507 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R508 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R509 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R510 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R511 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R512 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R513 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R514 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R515 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R516 | 1-216-813-11 | METAL CHIP | 220 | 5% | 1/16W |
| R517 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R518 | 1-216-822-11 | METAL CHIP | 1.2K | 5% | 1/16W |
| R521 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R522 | 1-216-827-11 | METAL CHIP | 3.3K | 5% | 1/16W |

MB | MOTOR | OPT IN | PANEL

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R524 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R525 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R532 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R533 | 1-216-797-11 | METAL CHIP | 10 | 5% | 1/16W |
| R554 | 1-216-797-11 | METAL CHIP | 10 | 5% | 1/16W |
| R701 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R711 | 1-218-289-11 | RES-CHIP | 510 | 5% | 1/16W |
| R712 | 1-218-289-11 | RES-CHIP | 510 | 5% | 1/16W |
| R713 | 1-218-289-11 | RES-CHIP | 510 | 5% | 1/16W |
| R717 | 1-218-285-11 | RES-CHIP | 75 | 5% | 1/16W |
| R718 | 1-218-285-11 | RES-CHIP | 75 | 5% | 1/16W |
| R719 | 1-218-285-11 | RES-CHIP | 75 | 5% | 1/16W |
| R724 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R725 | 1-216-833-11 | METAL CHIP | 10K | 5% | 1/16W |
| R737 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| R738 | 1-216-864-11 | METAL CHIP | 0 | 5% | 1/16W |
| | | < VARIABLE RESISTOR > | | | |
| RV501 | 1-223-583-11 | RES, ADJ, CARBON 1K | | | |
| | | < VIBRATOR > | | | |
| X101 | 1-795-174-11 | VIBRATOR, CERAMIC (16.5MHz) | | | |
| X102 | 1-767-519-11 | VIBRATOR, CRYSTAL (27MHz) | | | |
| ********** | | | | | |
| | 1-682-791-11 | MOTOR BOARD | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C721 | 1-162-306-11 | CERAMIC | 0.01uF | 30% | 16V |
| | | < CONNECTOR > | | | |
| CN721 | 1-770-516-31 | CONNECTOR, FFC 8P | | | |
| CN722 | 1-785-330-11 | PIN, CONNECTOR (LIGHT ANGLE)4P | | | |
| CN723 | 1-785-328-11 | PIN, CONNECTOR (LIGHT ANGRE)2P | | | |
| | | < RESISTOR > | | | |
| R721 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W F |
| | | < SWITCH > | | | |
| S701 | 1-771-822-11 | SWITCH, LEVER (SLIDE) (OPEN/CLOSE) | | | |
| ********** | | | | | |
| | 1-680-279-11 | OPT IN BOARD | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C1195 | 1-126-791-11 | ELECT | 10uF | 20% | 16V |
| C1196 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| | | < FERRITE BEAD > | | | |
| FB1195 | 1-412-473-21 | INDUCTOR | 0UH | | |
| | | < IC > | | | |
| IC1195 | 8-749-018-63 | IC GP1FA501RZ (DIGITAL IN (OPTICAL)) | | | |
| ********** | | | | | |
| | A-4727-117-A | PANEL BOARD, COMPLETE (including CD PANEL BOARD) (US) | | | |
| | A-4727-133-A | PANEL BOARD, COMPLETE (including CD PANEL BOALD) (CND) | | | |
| | A-4727-141-A | PANEL BOARD, COMPLETE (incuding CD PANEL BOARD) (AEP,UK) | | | |
| | A-4727-155-A | PANEL BOARD, COMPLETE (including CD PANEL BOARD) (AUS,E,E91,EA,MX,SP,MY) | | | |
| | A-4727-219-A | PANEL BOARD, COMPLETE (including CD PANEL BOARD)(TH) | | | |
| ********** | | | | | |
| | 4-224-584-01 | HOLDER (FL) | | | |
| | | < CAPACITOR > | | | |
| C1102 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1103 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1104 | 1-162-306-11 | CERAMIC | 0.01uF | 30% | 16V |
| C1105 | 1-162-306-11 | CERAMIC | 0.01uF | 30% | 16V |
| C1106 | 1-162-306-11 | CERAMIC | 0.01uF | 30% | 16V |
| C1107 | 1-162-306-11 | CERAMIC | 0.01uF | 30% | 16V |
| C1108 | 1-124-589-11 | ELECT | 47uF | 20% | 16V |
| C1109 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V |
| C1110 | 1-162-306-11 | CERAMIC | 0.01uF | 30% | 16V |
| C1111 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C1112 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C1113 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C1114 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C1120 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1121 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1122 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1123 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1124 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1125 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1126 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1127 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1128 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1129 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1130 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1131 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1132 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1133 | 1-126-796-11 | ELECT | 22uF | 20% | 50V |
| C1134 | 1-126-796-11 | ELECT | 22uF | 20% | 50V |
| C1135 | 1-126-513-11 | ELECT | 47uF | 20% | 6.3V |
| C1137 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V |
| C1138 | 1-162-306-11 | CERAMIC | 0.01uF | 30% | 16V |
| C1139 | 1-126-163-11 | ELECT | 4.7uF | 20% | 50V |
| C1140 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C1141 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1142 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1143 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C1203 | 1-162-306-11 | CERAMIC | 0.01uF | 30% | 16V (AUS,E,E91,EA,MX,SP,MY,TH) |
| C1204 | 1-115-868-11 | ELECT | 0.22uF | 20% | 50V (AUS,E,E91,EA,MX,SP,MY,TH) |
| C1205 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V (AUS,E,E91,EA,MX,SP,MY,TH) |
| C1206 | 1-162-215-31 | CERAMIC | 47PF | 5% | 50V (AUS,E,E91,EA,MX,SP,MY,TH) |
| C1207 | 1-162-290-31 | CERAMIC | 470PF | 10% | 50V (AUS,E,E91,EA,MX,SP,MY,TH) |
| C1208 | 1-115-867-11 | ELECT | 0.1uF | 20% | 50V (AUS,E,E91,EA,MX,SP,MY,TH) |
| C1209 | 1-115-872-11 | ELECT | 2.2uF | 20% | 50V (AUS,E,E91,EA,MX,SP,MY,TH) |
| C1210 | 1-162-284-31 | CERAMIC | 150PF | 10% | 50V (AUS,E,E91,EA,MX,SP,MY,TH) |
| C1211 | 1-115-872-11 | ELECT | 2.2uF | 20% | 50V (AUS,E,E91,EA,MX,SP,MY,TH) |
| C1212 | 1-124-584-00 | ELECT | 100uF | 20% | 10V (AUS,E,E91,EA,MX,SP,MY,TH) |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| C1213 | 1-126-157-11 | ELECT 10uF 20% 16V | (AUS,E,E91,EA,MX,SP,MY,TH) |
| C1214 | 1-126-157-11 | ELECT 10uF 20% 16V | (AUS,E,E91,EA,MX,SP,MY,TH) |
| C1215 | 1-162-215-31 | CERAMIC 47PF 5% 50V | (AUS,E,E91,EA,MX,SP,MY,TH) |
| C1216 | 1-126-791-11 | ELECT 10uF 20% 16V | (AUS,E,E91,EA,MX,SP,MY,TH) |
| C1241 | 1-162-294-31 | CERAMIC 0.001uF 10% 50V | |
| C1242 | 1-162-294-31 | CERAMIC 0.001uF 10% 50V | |
| C1250 | 1-164-159-11 | CERAMIC 0.1uF 50V | (AUS,E,E91,EA,MX,SP,MY,TH) |
| | | < CONNECTOR > | |
| CN1101 | 1-793-767-11 | CONNECTOR, BOARD TO BOARD 30P | |
| CN1108 | 1-784-726-11 | CONNECTOR, FFC 4P | |
| | | < DIODE > | |
| D1101 | 8-719-057-97 | DIODE SEL5923A-TP15 (GAME) | |
| D1102 | 8-719-057-97 | DIODE SEL5923A-TP15 (DIGITAL) | |
| D1103 | 8-719-057-97 | DIODE SEL5923A-TP15 (MD (VIDEO)) | |
| D1104 | 8-719-071-41 | DIODE SELS5923C-TP15 (TAPE A/B) | |
| D1105 | 8-719-071-41 | DIODE SELS5923C-TP15 (TUNER/BAND) | |
| D1106 | 8-719-071-41 | DIODE SELS5923C-TP15 (DVD) | |
| D1107 | 8-719-072-76 | DIODE SEL5E23C-TP15 | (MULTI CHANNEL DECODING) |
| D1108 | 8-719-063-93 | DIODE SLR325VC-N-T32 (ENTER) | |
| D1110 | 8-719-050-84 | DIODE RB441Q-40T-77 | |
| D1111 | 8-719-057-97 | DIODE SEL5923A-TP15 (EFFECT) | |
| D1112 | 8-719-057-97 | DIODE SEL5923A-TP15 (GROOVE) | |
| D1113 | 8-719-063-93 | DIODE SLR325VC-N-T32 (REC PAUSE/START) | |
| D1121 | 8-719-911-19 | DIODE 1SS119-25 | |
| | | < FERRITE BEAD > | |
| FB1101 | 1-412-473-21 | INDUCTOR 0UH | |
| | | < FILTER > | |
| FL1101 | 1-518-722-11 | INDICATOR TUBE, FLUORESCENT | |
| | | < IC > | |
| IC1101 | 6-800-934-01 | IC MB90M407APF-G-115-BND | |
| IC1102 | 8-759-827-69 | IC NJL63H400A-1 | |
| IC1201 | 8-759-636-55 | IC M5218AFP-TE1(AUS,E,E91,EA,MX,SP,MY,TH) | |
| | | < JACK > | |
| J1101 | 1-691-293-21 | JACK (PHONES) | |
| J1202 | 1-815-603-11 | JACK (MIC) (AUS,E,E91,EA,MX,SP,MY,TH) | |
| | | < TRANSISTOR > | |
| Q1101 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q1102 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q1103 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q1104 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q1105 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q1106 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q1107 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q1108 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q1109 | 8-729-422-57 | TRANSISTOR UN4111 | |
| Q1110 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | |
| Q1111 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q1112 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q1113 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q1120 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| Q1123 | 8-729-029-94 | TRANSISTOR DTC143TSA | |
| Q1124 | 8-729-029-94 | TRANSISTOR DTC143TSA | |
| Q1201 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | (AUS,E,E91,EA,MX,SP,MY,TH) |
| | | < RESISTOR > | |
| R1100 | 1-249-393-11 | CARBON 10 5% 1/4W | F |
| R1101 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1102 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1103 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1104 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1105 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1106 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1107 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R1108 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R1109 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1110 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1111 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1112 | 1-249-410-11 | CARBON 270 5% 1/4W | F |
| R1113 | 1-249-410-11 | CARBON 270 5% 1/4W | F |
| R1114 | 1-249-410-11 | CARBON 270 5% 1/4W | F |
| R1115 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R1116 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R1117 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R1118 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R1119 | 1-249-417-11 | CARBON 1K 5% 1/4W | F |
| R1120 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1121 | 1-249-409-11 | CARBON 220 5% 1/4W | F |
| R1122 | 1-249-409-11 | CARBON 220 5% 1/4W | F |
| R1123 | 1-249-409-11 | CARBON 220 5% 1/4W | F |
| R1124 | 1-249-409-11 | CARBON 220 5% 1/4W | F |
| R1125 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1126 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1127 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1128 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1129 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1130 | 1-249-407-11 | CARBON 150 5% 1/4W | F |
| R1131 | 1-249-412-11 | CARBON 390 5% 1/4W | F |
| R1132 | 1-249-407-11 | CARBON 150 5% 1/4W | F |
| R1133 | 1-249-407-11 | CARBON 150 5% 1/4W | F |
| R1134 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R1135 | 1-249-407-11 | CARBON 150 5% 1/4W | F |
| R1136 | 1-249-407-11 | CARBON 150 5% 1/4W | F |
| R1137 | 1-249-407-11 | CARBON 150 5% 1/4W | F |
| R1143 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1144 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1145 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1146 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1147 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1148 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1149 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R1155 | 1-249-413-11 | CARBON 470 5% 1/4W | F |
| R1156 | 1-249-414-11 | CARBON 560 5% 1/4W | F |
| R1157 | 1-249-416-11 | CARBON 820 5% 1/4W | F |
| R1158 | 1-249-417-11 | CARBON 1K 5% 1/4W | F |
| R1159 | 1-249-418-11 | CARBON 1.2K 5% 1/4W | F |
| R1160 | 1-249-419-11 | CARBON 1.5K 5% 1/4W | F |
| R1161 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | F |
| R1162 | 1-249-422-11 | CARBON 2.7K 5% 1/4W | F |

## PANEL

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R1163 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W F |
| R1164 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R1165 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R1166 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R1167 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W F |
| R1168 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W F |
| R1169 | 1-249-416-11 | CARBON | 820 | 5% | 1/4W F |
| R1170 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1171 | 1-249-418-11 | CARBON | 1.2K | 5% | 1/4W F |
| R1172 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W F |
| R1173 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W F |
| R1174 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F |
| R1175 | 1-249-416-11 | CARBON | 820 | 5% | 1/4W F |
| R1176 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1177 | 1-249-418-11 | CARBON | 1.2K | 5% | 1/4W F |
| R1178 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F |
| R1179 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R1180 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W F |
| R1181 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W F |
| R1182 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R1183 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R1184 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R1185 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W F |
| R1186 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W F |
| R1189 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R1190 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R1191 | 1-260-083-11 | CARBON | 47 | 5% | 1/2W |
| R1192 | 1-260-083-11 | CARBON | 47 | 5% | 1/2W |
| R1197 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R1198 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R1199 | 1-249-406-11 | CARBON | 120 | 5% | 1/4W F |
| R1203 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1204 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1205 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1206 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1207 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1208 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1209 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1210 | 1-247-883-00 | CARBON | 150K | 5% | 1/4W (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1211 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1212 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1213 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1214 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1215 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1231 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1280 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1281 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1282 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1283 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1285 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1286 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1287 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1288 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1289 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1290 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1291 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W F |
| R1292 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F |
| R1293 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F |
| R1294 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F |
| R1295 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F |
| R1296 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F |
| R1297 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W F |

< VARIABLE RESISTOR >

| | | |
|---|---|---|
| RV1201 | 1-227-309-11 | RES, VAR, CARBON 50K (MIC LEVEL) (AUS,E,E91,EA,MX,SP,MY,TH) |

< SWITCH >

| | | |
|---|---|---|
| S1101 | 1-418-725-11 | ENCODER, ROTARY (12 TYPE) (VOLUME) |
| S1116 | 1-762-875-21 | SWITCH, KEYBOARD (◀▶) |
| S1117 | 1-762-875-21 | SWITCH, KEYBOARD (■) |
| S1118 | 1-762-875-21 | SWITCH, KEYBOARD (❚❚) |
| S1119 | 1-762-875-21 | SWITCH, KEYBOARD (▶▶❙) |
| S1120 | 1-762-875-21 | SWITCH, KEYBOARD (❙◀◀) |
| S1121 | 1-762-875-21 | SWITCH, KEYBOARD (▶▶+) |
| S1122 | 1-762-875-21 | SWITCH, KEYBOARD (◀◀- ) |
| S1123 | 1-762-875-21 | SWITCH, KEYBOARD (GAME) |
| S1124 | 1-762-875-21 | SWITCH, KEYBOARD (MD (VIDEO)) |
| S1125 | 1-762-875-21 | SWITCH, KEYBOARD (DIGITAL) |
| S1126 | 1-762-875-21 | SWITCH, KEYBOARD (TAPE A/B) |
| S1127 | 1-762-875-21 | SWITCH, KEYBOARD (TUNET/BAND) |
| S1128 | 1-762-875-21 | SWITCH, KEYBOARD (DVD) |
| S1129 | 1-762-875-21 | SWITCH, KEYBOARD (PLAY MODE) |
| S1130 | 1-762-875-21 | SWITCH, KEYBOARD (REPEAT) |
| S1131 | 1-762-875-21 | SWITCH, KEYBOARD (DVD DISPLAY) |
| S1132 | 1-762-875-21 | SWITCH, KEYBOARD (TIMER SELECT) |
| S1133 | 1-762-875-21 | SWITCH, KEYBOARD (CLOCK TIMER SET) |
| S1134 | 1-762-875-21 | SWITCH, KEYBOARD (SPECTRUM) |
| S1135 | 1-762-875-21 | SWITCH, KEYBOARD (DISPLAY) |
| S1136 | 1-762-875-21 | SWITCH, KEYBOARD (TOOL MODE) |
| S1137 | 1-762-875-21 | SWITCH, KEYBOARD (ENTER) |
| S1138 | 1-762-875-21 | SWITCH, KEYBOARD (MOVIE MODE) |
| S1139 | 1-762-875-21 | SWITCH, KEYBOARD (MUSIC MODE) |
| S1140 | 1-762-875-21 | SWITCH, KEYBOARD (DSP EDIT) |
| S1141 | 1-762-875-21 | SWITCH, KEYBOARD (GAME MODE) |
| S1142 | 1-762-875-21 | SWITCH, KEYBOARD (P FILE) |
| S1143 | 1-762-875-21 | SWITCH, KEYBOARD (GROOVE) |
| S1144 | 1-762-875-21 | SWITCH, KEYBOARD (EFFECT) |
| S1145 | 1-762-875-21 | SWITCH, KEYBOARD (2CH/MULTI) |
| S1146 | 1-762-875-21 | SWITCH, KEYBOARD (REC PAUSE/START) |
| S1147 | 1-762-875-21 | SWITCH, KEYBOARD (CD SYNC HI-DUB) |
| S1148 | 1-762-875-21 | SWITCH, KEYBOARD (DVD MENU) |
| S1149 | 1-762-875-21 | SWITCH, KEYBOARD (DVD TITLE) |

< VIBRATOR >

| | | |
|---|---|---|
| X1101 | 1-795-054-51 | VIBRATOR, CERAMIC (4MHz) |

**********

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| | A-4726-861-A | RF-240 MOUNTED BOARD, COMPLETE | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C001 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C002 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C005 | 1-162-966-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V |
| C006 | 1-162-966-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V |
| C007 | 1-162-966-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V |
| C008 | 1-162-966-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V |
| C009 | 1-124-779-00 | ELECT CHIP | 10uF | 20% | 16V |
| C015 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C016 | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C017 | 1-126-206-11 | ELECT CHIP | 100uF | 20% | 6.3V |
| C018 | 1-115-416-11 | CERAMIC CHIP | 0.001uF | 5% | 25V |
| C019 | 1-164-739-11 | CERAMIC CHIP | 560PF | 5% | 50V |
| C021 | 1-124-779-00 | ELECT CHIP | 10uF | 20% | 16V |
| C022 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C023 | 1-126-206-11 | ELECT CHIP | 100uF | 20% | 6.3V |
| C024 | 1-115-416-11 | CERAMIC CHIP | 0.001uF | 5% | 25V |
| C025 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C026 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C027 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C028 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C031 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C032 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C033 | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C034 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C035 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C036 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10% | 16V |
| C038 | 1-165-176-11 | CERAMIC CHIP | 0.047uF | 10% | 16V |
| C039 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C040 | 1-164-217-11 | CERAMIC CHIP | 150PF | 5% | 50V |
| C043 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C044 | 1-124-779-00 | ELECT CHIP | 10uF | 20% | 16V |
| C046 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| C047 | 1-107-826-11 | CERAMIC CHIP | 0.1uF | 10% | 16V |
| C048 | 1-162-970-11 | CERAMIC CHIP | 0.01uF | 10% | 25V |
| | | < CONNECTOR > | | | |
| CN001 | 1-766-835-21 | CONNECTOR, FFC/FPC (ZIF) 26P | | | |
| CN002 | 1-784-875-21 | CONNECTOR,FFC(LIF(NON-ZIF))25P | | | |
| CN003 | 1-784-861-21 | CONNECTOR, FFC(LIF(NON-ZIF))9P | | | |
| CN004 | 1-784-861-21 | CONNECTOR, FFC(LIF(NON-ZIF))9P | | | |
| | | < DIODE > | | | |
| D001 | 8-719-988-61 | DIODE 1SS355TE-17 | | | |
| D004 | 8-719-988-61 | DIODE 1SS355TE-17 | | | |
| | | < IC > | | | |
| IC001 | 8-759-828-02 | IC SP3728AC | | | |
| | | < COIL > | | | |
| L001 | 1-412-031-11 | INDUCTOR CHIP 47uH | | | |
| L002 | 1-412-031-11 | INDUCTOR CHIP 47uH | | | |
| | | < TRANSISTOR > | | | |
| Q001 | 8-729-903-46 | TRANSISTOR 2SB1132-T100-QR | | | |
| Q002 | 8-729-903-46 | TRANSISTOR 2SB1132-T100-QR | | | |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| | | < RESISTOR > | | | |
| R002 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R003 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R005 | 1-216-845-11 | METAL CHIP | 100K | 5% | 1/16W |
| R006 | 1-216-838-11 | METAL CHIP | 27K | 5% | 1/16W |
| R007 | 1-216-803-11 | METAL CHIP | 33 | 5% | 1/16W |
| R008 | 1-216-803-11 | METAL CHIP | 33 | 5% | 1/16W |
| R009 | 1-216-821-11 | METAL CHIP | 1K | 5% | 1/16W |
| R010 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R011 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R020 | 1-216-803-11 | METAL CHIP | 33 | 5% | 1/16W |
| R023 | 1-216-803-11 | METAL CHIP | 33 | 5% | 1/16W |
| R025 | 1-216-841-11 | METAL CHIP | 47K | 5% | 1/16W |
| R029 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| R037 | 1-216-834-11 | METAL CHIP | 12K | 5% | 1/16W |
| R038 | 1-216-861-11 | METAL CHIP | 2.2M | 5% | 1/16W |
| R045 | 1-216-809-11 | METAL CHIP | 100 | 5% | 1/16W |
| ********** | | | | | |
| | 1-682-792-11 | SENSOR BOARD | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C712 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| | | < TRANSISTOR > | | | |
| Q711 | 8-729-029-66 | TRANSISTOR DTC114ESA | | | |
| Q712 | 8-729-921-53 | TRANSISTOR PT483F1 | | | |
| | | < RESISTOR > | | | |
| R711 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R712 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R713 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R714 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| | | < SWITCH > | | | |
| S711 | 1-771-821-11 | SWITCH, PUSH (1 KEY) (BU UP/DOWN) | | | |
| ********** | | | | | |
| | 1-680-190-11 | SUB TRANS BOARD | | | |
| | | ********** | | | |
| | 1-533-217-31 | HOLDER, FUSE | | | |
| | | < CAPACITOR > | | | |
| ⚠C901 | 1-113-925-11 | CERAMIC | 0.01uF | 20% | 250V |
| C902 | 1-126-768-11 | ELECT | 2200uF | 20% | 16V |
| C903 | 1-126-933-11 | ELECT | 100uF | 20% | 16V |
| C904 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| | | < CONNECTOR > | | | |
| CN901 | 1-564-321-00 | PIN, CONNECTOR 2P | | | |
| CN902 | 1-568-106-11 | PIN, CONNECTOR 4P (E,EA,SP,MY) | | | |
| * CN902 | 1-564-321-21 | PIN, CONNECTOR 2P (AEP,AUS,CND,E91,MX,TH,UK,US) | | | |
| CN903 | 1-785-329-11 | PIN, CONNECTOR (LIGHT ANGLE)3P | | | |
| | | < DIODE > | | | |
| ⚠D901 | 8-719-911-19 | DIODE 1SS119-25 | | | |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

## SUB TRANS

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| D902 | 8-719-024-99 | DIODE 11ES2-NTA2B | |
| D903 | 8-719-024-99 | DIODE 11ES2-NTA2B | |
| D904 | 8-719-024-99 | DIODE 11ES2-NTA2B | |
| D905 | 8-719-024-99 | DIODE 11ES2-NTA2B | |
| | | < FUSE > | |
| ⚠F911 | 1-533-470-11 | FUSE, GLASS TUBE (DIA. 5) (T3.15AL 250V) | (E,EA,SP,MY) |
| ⚠F912 | 1-533-470-11 | FUSE, GLASS TUBE (DIA. 5) (T3.15AL 250V) | (E,EA,SP,MY) |
| ⚠F913 | 1-533-454-11 | FUSE, GLASS TUBE (DIA. 5) (6.3A 125V) | (US,CND) |
| ⚠F913 | 1-533-468-11 | FUSE, GLASS TUBE (DIA. 5) (T2AL 250V) | (AEP,UK) |
| ⚠F913 | 1-533-470-11 | FUSE, GLASS TUBE (DIA. 5) (T3.15AL 250V) | (AUS,E91,TH) |
| ⚠F913 | 1-533-473-11 | FUSE, GLASS TUBE (DIA. 5) (T6.3AL 250V) | (E,EA,MX,SP,MY) |
| | | < IC > | |
| IC901 | 8-759-158-62 | IC TA78057S | |
| | | < TRANSISTOR > | |
| Q901 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | |
| | | < RESISTOR > | |
| R902 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R903 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| | | < RELAY > | |
| ⚠RY901 | 1-755-276-11 | RELAY, POWER | |
| | | < SWITCH > | |
| ⚠S901 | 1-786-055-21 | SELECTOR, VOLTAGE (VOLTAGE SELECTOR) | (E,EA,SP,MY) |
| | | < TRANSFORMER > | |
| ⚠T901 | 1-435-824-11 | TRANSFORMER, POWER (AEP,UK) | |
| ⚠T901 | 1-435-823-11 | TRANSFORMER, POWER (US,CND) | |
| ⚠T901 | 1-435-825-11 | TRANSFORMER, POWER | (AUS,E,E91,EA,MX,SP,MY,TH) |
| ********** | | | |
| | A-4727-113-A | SURROUND AMP BOARD, COMPLETE(US,CND) | |
| | A-4727-137-A | SURROUND AMP BOARD, COMPLETE (AEP,UK) | |
| | A-4727-157-A | SURROUND AMP BOARD, COMPLETE | (AUS,E91,EA,SP,MY) |
| | A-4727-197-A | SURROUND AMP BOARD, COMPLETE (E,MX) | |
| | A-4727-223-A | SURROUND AMP BOARD, COMPLETE (TH) | |
| | ********** | | |
| | | < CAPACITOR > | |
| C931 | 1-126-964-11 | ELECT 10uF 20% 50V | |
| C932 | 1-126-917-11 | ELECT 3300uF 20% 6.3V | |
| C933 | 1-126-964-11 | ELECT 10uF 20% 50V | |
| C934 | 1-126-935-11 | ELECT 470uF 20% 10V | |
| C935 | 1-126-964-11 | ELECT 10uF 20% 50V | |
| C936 | 1-126-917-11 | ELECT 3300uF 20% 6.3V | |
| C937 | 1-126-964-11 | ELECT 10uF 20% 50V | |
| C938 | 1-126-935-11 | ELECT 470uF 20% 10V | |
| C1001 | 1-126-964-11 | ELECT 10uF 20% 50V | |
| C1002 | 1-162-286-31 | CERAMIC 220PF 10% 50V | |

## SURROUND AMP

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| C1003 | 1-162-286-31 | CERAMIC 220PF 10% 50V | |
| C1004 | 1-126-947-11 | ELECT 47uF 20% 10V | |
| C1006 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C1007 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C1008 | 1-126-968-11 | ELECT 100uF 20% 50V | |
| C1041 | 1-126-964-11 | ELECT 10uF 20% 50V | |
| C1042 | 1-162-286-31 | CERAMIC 220PF 10% 50V | |
| C1043 | 1-162-286-31 | CERAMIC 220PF 10% 50V | |
| C1044 | 1-126-947-11 | ELECT 47uF 20% 10V | |
| C1046 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C1047 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C1051 | 1-126-964-11 | ELECT 10uF 20% 50V | |
| C1052 | 1-162-286-31 | CERAMIC 220PF 10% 50V | |
| C1053 | 1-162-286-31 | CERAMIC 220PF 10% 50V | |
| C1054 | 1-126-947-11 | ELECT 47uF 20% 10V | |
| C1056 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C1057 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C1058 | 1-126-968-11 | ELECT 100uF 20% 50V | |
| C1071 | 1-136-153-00 | FILM 0.01uF 5% 50V | |
| C1072 | 1-136-153-00 | FILM 0.01uF 5% 50V | |
| C1073 | 1-137-844-11 | ELECT 2200uF 20% 42V | |
| C1074 | 1-137-844-11 | ELECT 2200uF 20% 42V | |
| C1081 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C1082 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C1083 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C1084 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C1085 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| C1086 | 1-136-165-00 | FILM 0.1uF 5% 50V | |
| | | < CONNECTOR > | |
| CN1001 | 1-573-829-11 | CONNECTOR, BOARD TO BOARD 15P | |
| | | < DIODE > | |
| D933 | 8-719-050-84 | DIODE RB441Q-40T-77 | |
| D934 | 8-719-050-84 | DIODE RB441Q-40T-77 | |
| D1001 | 8-719-911-19 | DIODE 1SS119-25 | |
| D1041 | 8-719-911-19 | DIODE 1SS119-25 | |
| D1051 | 8-719-911-19 | DIODE 1SS119-25 | |
| D1071 | 8-719-510-68 | DIODE D5SBA204101 | |
| D1081 | 8-719-911-19 | DIODE 1SS119-25 | |
| D1082 | 8-719-911-19 | DIODE 1SS119-25 | |
| D1091 | 8-719-911-19 | DIODE 1SS119-25 | |
| | | < IC > | |
| IC931 | 8-759-039-69 | IC UPC7805AHF | |
| IC932 | 8-759-158-62 | IC TA78057S | |
| IC933 | 8-759-445-59 | IC BA033T | |
| IC934 | 8-759-445-59 | IC BA033T | |
| IC1001 | 8-749-017-19 | IC STK443-050 | |
| | | < COIL > | |
| L1081 | 1-420-872-00 | COIL, AIR-CORE | |
| L1082 | 1-420-872-00 | COIL, AIR-CORE | |
| L1083 | 1-420-872-00 | COIL, AIR-CORE | |
| | | < TRANSISTOR > | |
| Q931 | 8-729-030-19 | TRANSISTOR 2SB1640 | |
| Q932 | 8-729-900-80 | TRANSISTOR DTC114ES | |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

## SURROUND AMP

## TRANS

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| Q1001 | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA | | | |
| Q1016 | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA | | | |
| Q1017 | 8-729-119-78 | TRANSISTOR 2SC2785-HFE | | | |
| Q1041 | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA | | | |
| Q1051 | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA | | | |
| Q1081 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | | |
| Q1083 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | | |
| Q1084 | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA | | | |
| | | < RESISTOR > | | | |
| R931 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W F |
| R932 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W F |
| R933 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W F |
| R934 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R1001 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1002 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R1003 | 1-249-418-11 | CARBON | 1.2K | 5% | 1/4W F (AEP,UK) |
| R1003 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F (US,CND) |
| R1003 | 1-249-416-11 | CARBON | 820 | 5% | 1/4W F (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1004 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| ⚠R1005 | 1-220-755-11 | METAL | 0.22 | 10% | 2W |
| ⚠R1006 | 1-220-755-11 | METAL | 0.22 | 10% | 2W |
| R1007 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1008 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R1009 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R1010 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| ⚠R1011 | 1-212-881-11 | FUSIBLE | 100 | 5% | 1/4W |
| R1015 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R1016 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R1017 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R1018 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R1019 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| ⚠R1020 | 1-202-972-61 | FUSIBLE | 1 | 5% | 1/4W |
| R1031 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R1032 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R1033 | 1-249-439-11 | CARBON | 68K | 5% | 1/4W |
| R1041 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1042 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R1043 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F (AEP,U) |
| R1043 | 1-249-418-11 | CARBON | 1.2K | 5% | 1/4W F (US,CND) |
| R1043 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1044 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| ⚠R1045 | 1-220-755-11 | METAL | 0.22 | 10% | 2W |
| ⚠R1046 | 1-220-755-11 | METAL | 0.22 | 10% | 2W |
| R1047 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1048 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R1049 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R1050 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| R1051 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1052 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R1053 | 1-249-418-11 | CARBON | 1.2K | 5% | 1/4W F (AEP,UK) |
| R1053 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F (US,CND) |
| R1053 | 1-249-416-11 | CARBON | 820 | 5% | 1/4W F (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1054 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| ⚠R1055 | 1-220-755-11 | METAL | 0.22 | 10% | 2W |
| ⚠R1056 | 1-220-755-11 | METAL | 0.22 | 10% | 2W |
| R1057 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R1058 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R1059 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R1060 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| ⚠R1061 | 1-212-881-11 | FUSIBLE | 100 | 5% | 1/4W |
| R1071 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R1072 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R1081 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| R1082 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| R1083 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| R1084 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| R1085 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| R1086 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| R1087 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R1088 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R1089 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R1090 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| ⚠R1094 | 1-215-888-00 | METAL OXIDE | 220 | 5% | 2W (US,CND,AEP,UK) |
| ⚠R1094 | 1-215-889-00 | METAL OXIDE | 330 | 5% | 2W (AUS,E,E91,EA,MX,SP,MY,TH) |
| R1095 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R1096 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R1097 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R1098 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| ⚠R1099 | 1-215-888-00 | METAL OXIDE | 220 | 5% | 2W (US,CND,AEP,UK) |
| ⚠R1099 | 1-215-889-00 | METAL OXIDE | 330 | 5% | 2W (AUS,E,E91,EA,MX,SP,MY,TH) |
| | | < RELAY > | | | |
| RY1081 | 1-515-920-11 | RELAY | | | |
| RY1082 | 1-515-920-11 | RELAY | | | |
| | | < THERMISTOR > | | | |
| TH1001 | 1-807-796-11 | THERMISTOR | | | |
| | | < TERMINAL > | | | |
| TM1001 | 1-694-674-22 | TERMINAL BOARD (6P) | | | (REAR/CENTER SPEAKER) |
| ********** | | | | | |
| | 1-680-189-11 | TRANS BOARD ********** | | | |
| | 1-533-217-31 | HOLDER, FUSE | | | |
| | | < CAPACITOR > | | | |
| C911 | 1-128-576-11 | ELECT | 100uF | 20% | 63V |
| C912 | 1-126-960-11 | ELECT | 1uF | 20% | 50V |
| C913 | 1-126-968-11 | ELECT | 100uF | 20% | 50V |
| C915 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| | | < CONNECTOR > | | | |
| * CN913 | 1-564-518-11 | PLUG, CONNECTOR 3P | | | |
| * CN914 | 1-564-525-11 | PLUG, CONNECTOR 10P | | | |
| * CN915 | 1-564-519-11 | PLUG, CONNECTOR 4P | | | |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

**TRANS** **VIDEO**

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| | | < DIODE > | |
| D911 | 8-719-024-99 | DIODE 11ES2-NTA2B | |
| D912 | 8-719-983-88 | DIODE MTZJ-T-72-33C | |
| D913 | 8-719-118-56 | DIODE RD4.7F-T7B1 | |
| | | < FUSE > | |
| ⚠F916 | 1-533-473-11 | FUSE, GLASS TUBE (DIA. 5) (T6.3AL 250V) | (EXCEPT US,CND) |
| ⚠F916 | 1-576-537-11 | FUSE, GLASS TUBE (DIA. 5) (8A 125V) | (US,CND) |
| ⚠F917 | 1-533-473-11 | FUSE, GLASS TUBE (DIA. 5) (T6.3AL 250V) | (EXCEPT US,CND) |
| ⚠F917 | 1-576-537-11 | FUSE, GLASS TUBE (DIA. 5) (8A 125V) | (US,CND) |
| ⚠F918 | 1-533-472-11 | FUSE, GLASS TUBE (DIA. 5) (T5AL 250V) | (EXCEPT US,CND) |
| ⚠F918 | 1-576-537-11 | FUSE, GLASS TUBE (DIA. 5) (8A 125V) | (US,CND) |
| ⚠F919 | 1-533-472-11 | FUSE, GLASS TUBE (DIA. 5) (T5AL 250V) | (EXCEPT US,CND) |
| ⚠F919 | 1-576-537-11 | FUSE, GLASS TUBE (DIA. 5) (8A 125V) | (US,CND) |
| | | < TRANSISTOR > | |
| Q971 | 8-729-048-52 | TRANSISTOR 2SA1932(TP) | |
| | | < RESISTOR > | |
| ⚠R911 | 1-217-637-00 | FUSIBLE 1 5% 1/4W | (AEP,UK) |
| ⚠R911 | 1-219-124-11 | FUSIBLE 0.68 5% 1/4W | (EXCEPT AEP,UK) |
| R913 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R914 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R915 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R916 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| ⚠R918 | 1-219-237-91 | SOLID 3.3M 20% 1/2W | (US,CND) |
| | | < TRANSFORMER > | |
| ⚠T911 | 1-437-510-11 | TRANSFORMER, POWER (US,CND) | |
| ⚠T911 | 1-437-511-11 | TRANSFORMER, POWER (AEP,UK) | |
| ⚠T911 | 1-437-512-11 | TRANSFORMER, POWER | (AUS,E,E91,EA,MX,SP,MY,TH) |
| ********** | | | |
| | 1-682-902-11 | VIDEO BOARD<br>********** | |
| | | < CONNECTOR > | |
| CN601 | 1-779-274-11 | CONNECTOR, FFC(LIF(NON-ZIF))6P | |
| | | < DIODE > | |
| D601 | 8-719-056-83 | DIODE UDZ-TE-17-6.8B | |
| D602 | 8-719-056-83 | DIODE UDZ-TE-17-6.8B | |
| D603 | 8-719-056-83 | DIODE UDZ-TE-17-6.8B | |
| D604 | 8-719-056-83 | DIODE UDZ-TE-17-6.8B | |
| D605 | 8-719-056-83 | DIODE UDZ-TE-17-6.8B | |
| D606 | 8-719-056-83 | DIODE UDZ-TE-17-6.8B | |
| | | < JACK > | |
| J601 | 1-774-227-11 | JACK, PIN 1P (VIDEO OUT) | |
| J602 | 1-537-943-11 | TERMINAL, S (S VIDEO OUT) | |
| ********** | | | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| | | MISCELLANEOUS<br>********** | |
| 14 | 1-823-367-11 | WIRE (FLAT TYPE) (9 CORE) | |
| 15 | 1-823-370-11 | WIRE (FLAT TYPE) (6 CORE) | |
| 16 | 1-823-368-11 | WIRE (FLAT TYPE) (25 CORE) | |
| 68 | 1-796-001-11 | TOUCH PAD | |
| 102 | 1-773-042-11 | WIRE (FLAT TYPE) (17 CORE) | |
| 103 | 1-757-419-11 | WIRE (FLAT TYPE) (21 CORE) | |
| 104 | 1-757-420-11 | WIRE (FLAT TYPE) (23 CORE) | |
| 105 | 1-823-369-11 | WIRE (FLAT TYPE) (12 CORE) | |
| ⚠110 | 1-777-071-81 | CORD, POWER (AEP,E91,EA,SP,MY,UK) | |
| ⚠110 | 1-783-203-11 | CORD, POWER (AUS) | |
| ⚠110 | 1-783-531-31 | CORD, POWER (US,CND) | |
| ⚠110 | 1-791-901-11 | CORD, POWER (E,MX,TH) | |
| ⚠111 | 1-569-008-21 | ADAPTOR, CONVERSION (EA,SP,MY) | |
| ⚠112 | 1-770-019-11 | ADAPTOR, CONVERSION PLUG 3P (UK) | |
| 155 | 1-454-887-32 | SOLENOID, PLUNGER | |
| 161 | X-3378-241-1 | MOTOR ASSY | |
| 209 | X-3378-241-1 | MOTOR ASSY | |
| 259 | 1-791-983-12 | WIRE (FLAT TYPE) (8 CORE) | |
| ⚠277 | 8-820-144-06 | OPTICAL PICK-UP KHM-240AAA (TYPE A) | |
| ⚠277 | A-6062-709-A | SERVICE ASSY, KHM-270AAA (TYPE B) | |
| 283 | 1-823-621-11 | CABLE, FLEXIBLE FLAT (26 CORE) | |
| 284 | 1-823-622-11 | WIRE (FLAT TYPE) (9 CORE) | |
| FL1101 | 1-518-722-11 | INDICATOR TUBE, FLUORESCENT | |
| M721 | A-4672-826-A | MOTOR ASSY | |
| M961 | 1-763-072-11 | FAN, DC | |
| ⚠T911 | 1-437-510-11 | TRANSFORMER, POWER (US,CND) | |
| ⚠T911 | 1-437-511-11 | TRANSFORMER, POWER (AEP,UK) | |
| ⚠T911 | 1-437-512-11 | TRANSFORMER, POWER | (AUS,E,E91,EA,MX,SP,MY,TH) |
| ********** | | | |
| | | **********<br>HARDWARE LIST<br>********** | |
| #1 | 7-685-646-79 | SCREW +BVTP 3X8 TYPE2 IT-3 | |
| #2 | 7-685-647-79 | SCREW +BVTP 3X10 TYPE2 IT-3 | |
| #3 | 7-685-105-19 | TPG +P 2X8, TYPE 2, NON-SLIT | |
| #4 | 7-685-881-09 | SCREW +BVTT 4X8 (S) | |
| #5 | 7-685-650-79 | SCREW +BVTP 3X16 TYPE2 IT-3 | |
| #6 | 7-685-872-09 | SCREW +BVTT 3X8 (S) | |
| #7 | 7-623-921-01 | RING, RETAINING, CAPSTAN | |
| #8 | 7-628-254-05 | SCREW +PS 2.6X5 | |
| #9 | 7-685-781-09 | SCREW +PTT 2X4 (S) | |

| | |
|---|---|
| The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified. | Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié. |

# HCD-DP1000D

SONY

# SERVICE MANUAL

Ver 1.5 2002.10

*US Model*
*Canadian Model*
*AEP Model*
*UK Model*
*E Model*
*Australian Model*

# SUPPLEMENT-1

**File this supplement with the service manual.**

**Subject: 1. DVD test Mode**

9-873-314-81

# 1. TEST MODE

## 1-1. GENERAL DESCRIPTION

The Test Mode allows you to make diagnosis and adjustment easily using the remote commander and monitor TV. The instructions, diagnostic results, etc. are given on the on-screen display (OSD).

## 1-2. STARTING TEST MODE

Press the [I/⏻] button to turn the set ON, and set the function to DVD. Press the [⏏ 1] button to insert the DVD disc, and wait for TOC reading is finish. Next, while pushing the [■] button and the [ENTER] and [DISC 1] button on the main unit at the same time, turn the regulator to the right to start Test Mode and display the menu shown below on the TV screen. At the bottom of the menu screen, the model name and revision number are displayed.
To execute each function, select the desired menu and press its number on the remote commander. To exit from Test Mode, press the [I/⏻] button.

**Note:** In the Test Mode, use the remote commander (RM-SD170) (Part No.: 1-418-911-11).

```
Test Mode Menu

0. Syscon Diagnosis
1. Drive Auto Adjustment
2. Drive Manual Operation
3. Mecha Aging
4. Emergency History
5. Version Information
6. Video Level Adjustment
                Exit: Power Key
_
Model    : HCX-984_xxxx
Revision: 1.xxx
```

## 1-3. SYSCON DIAGNOSIS

The same contents as board detail check by serial interface can be checked from the remote commander.
On the Test Mode Menu screen, press [10/0] key on the remote commander, and the following Check Menu will be displayed.

```
    ### Syscon Diagnosis ###
          Check Menu
0. Quit
1. All
2. Version
3. Peripheral
4. Servo
5. Supply
6. AV Decoder
7. Video
8. Audio
_
```

### 0. Quit

Quit the Syscon Diagnosis and return to the Test Mode Menu.

### 1. All

All items continuous check
This menu checks all diagnostic items continuously. Normally, all items are checked successively one after another automatically unless an error is found, but at a certain item that requires judgment through a visual check to the result, the following screen is displayed for the key entry.

```
    ### Syscon Diagnosis ###

         Diag All Check
          No. 2 Version

 2-3. ROM Check Sum
Check Sum = 2005



Press NEXT Key to Continue
Press PREV Key to Repeat
_
```

For the ROM Check, the check sum calculated by the Syscon is output, and therefore you must compare it with the specified value for confirmation.
Following the message, press [NEXT] key to go to the next item, or [PREV] key to repeat the same check again. To quit the diagnosis and return to the Check Menu screen, press the [■] or [ENTER] key. If an error occurred, the diagnosis is suspended and the error code is displayed as shown below.

```
    ### Syscon Diagnosis ###




 3-3. EEPROM Check
Error 03: EEPROM Write/Reed N
Address    : 00000001
Write Data : 2492
Read Data  : 2490
Press NEXT Key to Continue
Press PREV Key to Repeat
_
```

Press the [■] key to quit the diagnosis, or [PREV] key to repeat the same item where an error occurred, or [NEXT] key to continue the check from the item next to faulty item.

Selecting 2 and subsequent items calls the submenu screen of each item.
For example, if “5. Supply” is selected, the following submenu will be displayed.

```
    ### Syscon Diagnosis ###
          Check Menu
         No. 5 Supply
0. Quit
1. All
2. ARP Register Check
3. ARP to RAM Data Bus
4. ARP to RAM Address Bus
5. ARP RAM Check
_
```

### 0. Quit

Quit the submenu and return to the Check Menu.

### 1. All

All submenu items continuous check
This menu checks 2 and subsequent items successively. At the item where visual check is required for judgment or an error occurred, the checking is suspended and the message is output for key entry. Normally, all items are checked successively one after another automatically unless an error is found.

Selecting 2 and subsequent items executes respective menus and outputs the results.
For the contents of each submenu, see “Check Items List”.

General Description of Checking Method

## 2. Version

(2-2) Revision
ROM revision number is displayed.
Error: Not detected.
The revision number defined in the source file of ROM (IC206) is displayed with four digits.

(2-3) ROM Check Sum
Check sum is calculated.
Error: Not detected.
The 8-bit data are added at addresses 0x000F0000 ~ 0x002EFFFF of ROM (IC206) and the result is displayed with 4-digit hexadecimal number. Error is not detected. Compare the result with the specified value.

(2-4) Model Type
Model code is displayed.
Error: Not detected.
The model code read from EEPROM (IC201) is displayed with 2-digit hexadecimal number.

| Model | Model No. |
|---|---|
| US and Canadian models | 20 |
| E, Mexican and Argentine models | 22 |
| AEP, UK and Saudi Arabia models | 23 |
| Australian model | 24 |
| Malaysia, Singapore, Hong Kong, Thai and Taiwan models | 25 |
| Chinese model | 26 |

(2-5) Region
Region code is displayed.
Error: Not detected.
The region code determined from the model code is displayed.

## 3. Peripheral

(3-2) Gate Array Check
Data write → read, and accord check
Error 02: Gate array write/read discord
Data 0x00~0xFF are written to the address 0xF of gate array (IC601), then read and checked if they accord.

(3-3) EEPROM Check
Data write → read, and accord check
Error 03: EEPROM write/read discord
Data 0x9249, 0x2942, 0x4294 are written to addresses 0x00~0xFF of EEPROM (IC201), then read and checked. Before writing, the data are saved, then after checking, they are written to restore the contents of EEPROM.

## 4. Servo

(4-2) Servo DSP Check
Data write → read, and accord check
Error 12: Read data discord
Data 0x9249, 0x2942, 0x4294 are written to the address 0x602 of RAM in the Servo DSP (IC701), then read and checked.

(4-3) DSP Driver Test
Test signal data → DSP Driver
Error: Not detected.
**Caution:** Do not conduct this test with a mechanical deck connected.
The maximum voltage is applied to the Servo Driver IC (IC801, IC802). If mechanical deck is connected, the motor and optics could be damaged. Disconnect mechanical deck following the output message, then enter specified 4- or 5-digit number from the remote commander, and press the ENTER. The test is conducted only when the input data accord. Check the output level, then press the NEXT to finish the test.
This test is skipped if “All” is selected.

Supplement: How to disconnect mechanical deck
Disconnect flat cables connected to the CN002 and CN003 of MB board. Also, disconnect harness from the CN013 of MB board.

## 5. Supply

**Caution:** Do not conduct this check with a mechanical deck connected.
An access is made to the stream supply and servo control IC (IC303) and external RAM (IC304) using check data. If mechanical deck is connected, the motor and optics could be damaged. This check is also executed by the “All” menu item.

Supplement: How to disconnect mechanical deck
Disconnect flat cables connected to the CN002 and CN003 of MB board. Also, disconnect harness from the CN013 of MB board.

(5-2) ARP Register Check
Data write → read, and accord check
Error 08: ARP register write, and read data discord
Data 0x00 to 0xFF are written to the TMAX register (address 0xC6) in ARP (IC303), then they are read and checked.

(5-3) ARP to RAM Data Bus
Data write → read, and accord check
Error 09: ARP ←→ RAM data bus error
Data 0x0001 to 0x8000 where one bit each is set to 1 are written to the address 0 of RAM (IC304) connected to the ARP (IC303) through the bus, then they are read and checked. In case of discord, written bit pattern and read data are displayed. If data where multiple bits are 1 are read, the bits concerned may touch each other. Further, if data where certain bit is always 1 or 0 regardless of written data, the line could be disconnected or shorted.

(5-4) ARP to RAM Address Bus
Data write → other address read discord check
Error 10: ARP → RAM address bus error
Caution: Address and data display in case of an error is different from the display of other diagnosis (described later).
Before starting the test, all addresses of RAM (IC304) are cleared to 0x0000.
First, 0xA55A is written to the address 0x00000, and the address data are read and checked from addresses 0x00001 to 0x80000 while shifting 1 bit each. Next, the data at that address is cleared, and it is written to the address 0x00001, and read and checked in the same manner. This check is repeated up to the address 0x80000 while shifting the address data by 1 bit each.
If data other than 0 is read at the addresses except written address, an error is given because all addresses were already cleared to 0. In this check, the error display pattern is different from that of other diagnosis; read data, written address, and read address are displayed in this order. However, the message uses same template, and accordingly exchange Address and Data when reading. The following display, for example,

```
    ### Syscon Diagnosis ###




 5-4. ARP to RAM Address Bus
Error 10: ARP - RAM Address B
Address    : 0000A55A
Write Data : 00000000
Read Data  : 00080000
Press NEXT Key to Continue
Press PREV Key to Repeat
_
```

shows the data 0xA55A was read from address 0x00080000 though it was written to the address 0x00000000. This implies that these addresses are in the form of shadow. Also, if the read data is not 0xA55A, another error will be present.

(5-5) ARP RAM Check
Data write → read, and accord check
Error 11: ARP RAM read data discord
The program code data stored in ROM are copied to all areas of RAM (IC304) connected to the ARP (IC303) through the bus, then they are read and checked if they accord. If the detail check was selected initially, the data are written to all areas and read, then the same test is conducted once again with the data where all bits are inverted between 1 and 0. If discord is detected, faulty address, written data, and read data are displayed following the error code 11, and the test is suspended.

## 6. AV Decoder

(6-2) 1930 RAM
Data write → read, and accord check
Error 13: AVD RAM read data discord
The program code data stored in ROM (IC206) are copied to all areas of RAM (IC402, IC403) connected to the AVD (IC401) through the bus, then they are read and checked if they accord. Further, the same test is conducted once again with the data where all bits are inverted between 1 and 0. If discord is detected, faulty address, written data, and read data are displayed following the error code 13, and the test is suspended.

(6-3) 1930 SP
ROM → AVD RAM → Video OUT
Error: Not detected.
The data including sub picture streams in ROM (IC206) are transferred to the RAM (IC402, IC403) in AVD (IC401), and output as video signals from the AVD (IC401).
They are output from all video terminals (Composite, Y/C).

## 7. Video

(7-2) Color Bar
AVD color bar command write → Video OUT
Error: Not detected.
The command is transferred to the AVD, and the color bar signals are output from video terminals.
They are output from all video terminals (Composite, Y/C).

## 8. Audio

(8-2) ARP → 1930
Error 14: ARP → 1930 video NG
15 : ARP → 1930 audio NG

Check Items List

2) Version
(2-2) Revision
(2-3) ROM Check Sum
(2-4) Model Type
(2-5) Region

3) Peripheral
(3-2) Gate Array Check
(3-3) EEPROM Check

4) Servo
(4-2) Servo DSP Check
(4-3) DSP Driver Test

5) Supply
(5-2) ARP Register Check
(5-3) ARP to RAM Data Bus
(5-4) ARP to RAM Address Bus
(5-5) ARP RAM Check

6) AV Decoder
(6-2) 1930 RAM
(6-3) 1930 SP

7) Video
(7-2) Color Bar

8) Audio
(8-2) ARP → 1930
(8-3) Test Tone

Error Codes List
00: Error not detected
01: RAM write/read data discord
02: Gate array NG
03: EEPROM NG
08: ARP register read data discord
09: ARP ←→ RAM data bus error
10: ARP ←→ RAM address bus error
11: ARP RAM read data discord
12: Servo DSP NG
13: 1930 SDRAM NG
14: ARP → 1930 video NG
15: ARP → 1930 audio NG
16: 1910 UCODE download NG
17: System call error (function not supported)
18: System call error (parameter error)
19: System call error (illegal ID number)
20: System call error (time out)
90: Error occurred
91: User verification NG
92: Diagnosis cancelled

## 1-4. DRIVE AUTO ADJUSTMENT

On the Test Mode Menu screen, press [1] key on the remote commander, and the Adjustment Menu will be displayed.

```
   ## Drive Auto Adjustment ##

         Adjustment Menu

0. ALL
1. DVD-SL
2. CD
3. DVD-DL
4. SACD



                    Exit: RETURN
```

Normally, [10/0] is selected to adjust DVD (single layer), CD, DVD (dual layer), and SACD in this order. But, individual items can be adjusted for the case where adjustment is suspended due to an error. In this mode, the adjustment can be made easily through the operation following the message displayed on the screen.
The disc used for adjustment must be the one specified for adjustment. However, for SACD disc, use the player with initial data if the disc is not available.

### 0. ALL

Select [10/0] and press [ENTER] key, and the servo set data in EEPROM will be initialized. Then, 1. DVD-SL disc, 2. CD disc, 3. DVD-DL disc, and 4. SACD disc are adjusted in this order. Each time one disc was adjusted, it is ejected. Replace it with the specified disc following the message. Though the message to confirm whether discs other than SACD disc are adjusted is not displayed, you can finish the adjustment if pressing the [■] button. During adjustment of each disc, the measurement for disc type judgment is made. As automatic adjustment does not judge the disc type unlike conventional models, take care not to insert wrong type discs. Also, do not give a shock during adjustment.

### 1. DVD-SL (single layer)

Select [1], insert DVD single layer disc, and press [ENTER] key, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM.

DVD Single Layer Disc Adjustment Steps

1. SLED TILT Reset
2. Disc Check Memory SL
3. Wait 300 msec
4. Set Disc Type SL
5. LD ON
6. Spdl Start
7. Wait 1 sec
8. Focus Servo ON 0
9. Auto Track Offset Adjust
10. CLVA ON
11. Wait 500 msec
12. Tracking ON
13. Wait 1 sec
14. Sled ON
15. Check CLV Lock
16. Auto LFO Adjust
17. Auto Focus Offset Adjust
18. Auto Tilt Position Adjust
19. Auto Focus Gain Adjust
20. Auto Focus Offset Adjust
21. EQ Boost Adjust
22. Auto LFO Adjust
23. Auto Track Gain Adjust

Search Check

24. 32Tj Fwd
25. 32Tj Rev
26. 500Tj Fwd
27. 500Tj Rev

28. All Servo Stop
29. Eep Copy Loop Filter Offset

## 2. CD

Select [2], insert CD disc, and press [ENTER] key, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM.

### CD Adjustment Steps

1. Sled Tilt Rest
2. Disc Check Memory CD
3. Wait 500 msec
4. Set Disc Type CD
5. LD ON
6. Spdl Start
7. Wait 500 msec
8. Focus Servo ON 0
9. Auto Track Offset Adjust

10. CLVA ON
11. Wait 500 msec
12. Tracking ON
13. (TC Display Start)
14. Wait 1 sec
15. Jitter Display Start
16. Sled ON
17. Check CLV ON
18. Auto LFO Adjust
19. Auto Focus Offset Adjust
20. Auto Focus Gain Adjust
21. Auto Focus Offset Adjust
22. Eq Boost Adjust
23. Auto LFO Adjust
24. Auto Track Gain Adjust

#### Search Check

25. 32Tj Fwd
26. 32Tj Rev
27. 500Tj Fwd
28. 500Tj Rev

29. All Servo Stop

## 3. DVD-DL (dual layer)

Select [3], insert DVD dual layer disc, and press [ENTER] key, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM.

### DVD Dual Layer Disc Adjustment Steps

1. Sled Tilt Reset
2. Disc Check Memory DL
3. Wait 500 msec
4. Set Disc Type DL
5. LD ON
6. Spdl Start
7. Wait 1 sec, Layer 1 Adjust
8. Focus Servo ON 0
9. Auto Track Offset Adjust

10. Clva ON
11. Wait 500 msec
12. Tracking ON
13. Wait 500 msec
14. Sled ON
15. Check CLV Lock
16. Auto Loop Filter Offset Auto Focus Adjust
17. Auto Focus Gain Adjust
18. Auto Focus Offset Adjust
19. Eq Boost Adjust
20. Auto Loop Filter Offset
21. Auto Track Gain Adjust

#### Search Check

22. 32Tj Fwd
23. 32Tj Rev
24. 500Tj Fwd
25. 500Tj Rev

#### Layer 0 Adjust

26. Fj (L1 -> L0)
27. Auto Track Offset Adjust L0

28. Clva ON
29. Wait 500 msec
30. Tracking ON
31. Wait 500 msec
32. Sled ON
33. Check CLV Lock
34. Auto Focus Filter Offset
35. Auto Focus Adjust
36. Auto Focus Gain Adjust
37. Auto Focus Offset Adjust
38. Eq Boost Adjust
39. Auto Loop Filter Offset
40. Auto Track Gain Adjust

#### Search Check

41. 32Tj Fwd
42. 32Tj Rev
43. 500Tj fwd
44. 500Tj Rev

#### Layer Jump Check

45. Lj (L0 -> L1)
46. Lj (L1 -> L0)

47. All Servo Stop

### 4. SACD

Select [4], insert SACD disc, and press [ENTER] key, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM. However, if SACD disc is not available, use the player with initial data, skipping the SACD adjustment. In this case, you can finish the adjustment if pressing the [■] button.

SACD Adjustment Steps

1. Sled Tilt Reset
2. Set Disc Type CD
3. LD ON
4. Spdl Start
5. Wait 500 msec
6. Focus Servo ON 0
7. Auto track Offset Adjust
8. CLVA ON
9. Wait 500 msec
10. Tracking ON
11. Wait 1 sec
12. Sled ON
13. Check CLV ON
14. Auto Focus Offset Adjust
15. Auto Focus Gain Adjust
16. Auto Focus Offset Adjust
17. Eq Boost Adjust
18. Auto LFO Adjust
19. Auto Track Gain Adjust

20. 32Tj Fwd
21. 32Tj Rev
22. 500Tj Fwd
23. 500Tj Rev

24. All Servo Stop

## 1-5. DRIVE MANUAL OPERATION

On the Test Mode Menu screen, select [2], and the Operation Menu will be displayed. For the manual operation, each servo on/off control and adjustment can be executed manually.

```
  ## Drive Manual Operation ##

         Operation Menu
1. Disc type
2. Servo Control
3. Track/Layer Jump
4. Manual Adjustment
5. Auto Adjustment
6. Memory Check

0. Disc Check Memory

                  Exit: Return
```

In using the manual operation menu, take care of the following points. These commands do not provide protection, thus requiring correct operation. The sector address or time code field is displayed when a disc is loaded.

1. Set correctly the disc type to be used on the Disc Type screen.
   The disc type must be set after a disc was loaded.
   The set disc type is cleared when the tray is opened.
2. After power ON, if the Drive Manual Operation was selected, first perform "Reset SLED TILT" by opening 1. Disc Type screen.
3. In case of an alarm, immediately press the [■] button to stop the servo operation, and press the [I/⏻] button to turn the power OFF.

Basic operation (controllable from front panel or remote commander)

| | |
|---|---|
| [I/⏻] | Power OFF (release the Test Mode) |
| [■] | Servo stop |
| [⏏] | Stop+Eject/Loading |
| [RETURN] | Return to Operation Menu or Test Mode Menu |
| [NEXT], [PREV] | Transition between sub modes of menu |
| [1] to [9], [10/0] | Selection of menu items |
| Cursor UP/DOWN | Increase/Decrease in manually adjusted value |

### 0. Disc Check Memory

```
            Disc Check



1. SL Disc Check
2. CD Disc Check
3. DL Disc Check



0. Reset SLED TILT
```

On this screen, the mirror time is measured to judge the disc and it is written to the EEPROM. First load DVD SL disc and press [1], next load CD disc and press [2], and finally load DVD DL disc and press [3].
The adjustment must be executed more than once after default data were written. External vibration or shock to the player must not be given. Reference value for DVD is from 10 to 20, and for CD, from 28 to 4F.
Check that the value of CD is larger than that of DVD.
When those values are beyond a range perform this adjustment again.
From this screen, you can go to another mode by pressing [NEXT] or [PREV] key, but you cannot enter this mode from another mode. You can enter this mode from the Operation Menu screen only.

## 1. Disc Type

```
          Disc Type
1. Disc Type Auto Check
2. DVD SL   12 cm
3. DVD DL   12 cm
4. CD       12cm
5. SACD     12 cm
6. dvd SL   8 cm
7. DVD DL   8 cm
8. CD       8 cm
9. SACD     8 cm
0. Reset SLED TILT
                        EMG. 00
```

On this screen, select the disc type. To select the disc type, press the number of the loaded disc. The selected disc type is displayed at the bottom. Selecting [1] automatically selects and displays the disc type. In case of wrong display, retry "Disc Check Memory". Also, opening the tray causes the set disc type to be cleared. In this case, set the disc type again after loading.
In performing manual operation, the disc type must be set.
Once the disc type has been selected, the sector address or time code display field will appear as shown below. These values are displayed when PLL is locked.

```
          Disc Type
1. Disc Type Auto Check
2. DVD SL   12 cm
3. DVD DL   12 cm
4. CD       12cm
5. SACD     12 cm
6. dvd SL   8 cm
7. DVD DL   8 cm
8. CD       8 cm
9. SACD     8 cm
0. Reset SLED TILT
       SA._____ SI.___ EMG. 00
DVD SL 12 cm
```

***Display when DVD SL 12cm disc was selected***

```
          Disc Type
1. Disc Type Auto Check
2. DVD SL   12 cm
3. DVD DL   12 cm
4. CD       12cm
5. SACD     12 cm
6. dvd SL   8 cm
7. DVD DL   8 cm
8. CD       8 cm
9. SACD     8 cm
0. Reset SLED TILT
        TC.___:___:___ EMG. 00
CD   12 cm
```

***Display when CD 12cm disc was selected***

[10/0] Reset SLED TILT — Reset the Sled and Tilt to initial position.

[1] Disk Type Check — Judge automatically the loaded disc. As the judged result is displayed at the bottom of screen, make sure that it is correct.
If Disc Check Memory Menu has not been executed after EEPROM default setting, the disc type cannot be judged. In this case, return to the initial menu and make a check for three types of discs (SL, DL, CD).

[2] to [9] — Select the loaded disc. The adjusted value is written to the address of selected disc. No further entry is necessary if [1] was selected.

## 2. Servo Control

```
         Servo Control
1. LD         Off R.Sled FWD
2. SP         Off L.Sled REV
3. Focus      Off
4. TRK.       Off
5. Sled       Off
6. CLVA       Off
7. FCS. Srch Off


0. Reset SLED TILT
       SA._____ SI.___ EMG. 00
DVD SL 12 cm
```

On this screen, the servo on/off control necessary for replay is executed. Normally, turn on each servo from 1 sequentially and when CLVA is turned on, the usual trace mode becomes active. In the trace mode, DVD sector address or CD time code is displayed. This is not displayed where the spindle is not locked.
The spindle could run overriding the control if the spindle system is faulty or RF is not present. In such a case, do not operate CLVA.

| | |
|---|---|
| [10/0] Reset SLED TILT | Reset the Sled and Tilt to initial position. |
| [1] LD | Turn ON/OFF the laser. |
| [2] SP | Turn ON/OFF the spindle. |
| [3] Focus | Search the focus and turn on the focus. |
| [4] TRK | Turn ON/OFF the tracking servo. |
| [5] Sled | Turn ON/OFF the sled servo. |
| [6] CLVA | Turn ON/OFF normal servo of spindle servo. |
| [7] FCS. Srch | Apply same voltage as that of focus search to the focus drive to check the focus drive system. |
| [→] Sled FWD | Move the sled outward. Perform this operation with the tracking servo turned off. |
| [←] Sled REV | Move the sled inward. Perform this operation with the tracking servo turned off. |
| [↑] Tilt UP | Move the tilt upward. |
| [↓] Tilt DOWN | Move the tilt downward. |

The following menus are normally not used.

### 3. Track/Layer Jump

### 4. Manual Adjustment

### 5. Auto Adjustment

The persons who do not know well about these menus should not use them.

### 6. Memory Check

```
EEPROM DATA
                 CD        — DVD —
ID No. 00       SACD     SL   L0   L1
Focus Gain     xx xx     xx   xx   xx
TRK. Gain      xx xx     xx   xx   xx
Focus Offset   xx xx     xx   xx   xx
TRK. Offset    xx xx     xx   xx   xx
L. F. Offset   xx xx     xx   xx   xx
EQ Boost       xx xx     xx   xx   xx
Jitter         xx xx     xx   xx   xx
Mirror Time    xx xx     xx   xx   xx

_
CLEAR: Default Set
```

This screen displays current servo adjusted data stored in the EEPROM. Though adjusted data can be initialized with the [CLEAR] key, they cannot be restored after initialization.
So, before clearing, make a note of the adjusted data.
For reference, the drive has been designed so that the gain center value is 20 and offset value is 80. Other values will be in a range of 10 to 80. If extreme value such as 00 or FF is set, adjustment will be faulty. In such a case, check for disc scratch or cable disconnection, then perform adjustment again.

## 1-6. MECHA AGING

```
     ### Aging Test MENU ###

          Operation Menu

1. Changer Open/Close Test

2. Changer Exchange Test




                      Exit: RETURN
```

On the Test Mode Menu Screen, selecting [3] executes the aging of the mechanism. Changer Open/Close Test or Changer Exchange Test are selected by pressing the [1] or [2]. During aging, the repeat cycle is displayed. Aging can be aborted at any time by pressing the [■] key. After the operation is stopped, press the [■] key or [RETURN] key aging to return to the Test Mode Menu.

[1] Repeat open and close the disc tray from disc 1 to disc 5.
[2] After press the [2] key, select the disc number by pressing some key of [1] to [5] and open the disc tray of selected number. Press the [►] key to start playback the disc.
While playback the disc, repeat open and close the disc tray of other disc.

## 1-7. EMERGENCY HISTORY

```
       ### EMG. History ###

Laser Hours     CD   xxxxxxxh
                DVD  xxxxxxxh

1. 00 00 00 00  00 00 00 00
   00 00 00 00  00 00 00 00

2. 00 00 00 00  00 00 00 00
   00 00 00 00  00 00 00 00

Select: 1 — 9   Scroll: UP/DOWN
(1: Last EMG.)  Exit: Return
```

On the Test Mode Menu screen, selecting [4] displays the information such as servo emergency history. The history information from last 1 up to 10 can be scrolled with [↑] key or [↓] key. Also, specific information can be displayed by directly entering that number with ten keys.

The upper two lines display the laser ON total hours. Data below minutes are omitted.

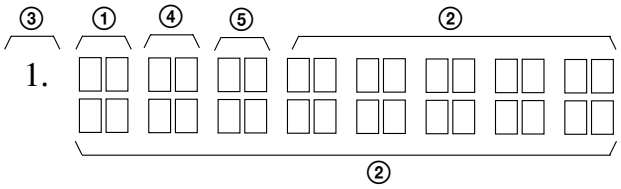
Clearing History Information

◎ Clearing laser hours
Press [DVD DISPLAY] and [CLEAR] keys in this order.
Both CD and DVD data are cleared.

◎ Clearing emergency history
Press [TITLE] and [CLEAR] keys in this order.

◎ Initializing set up data
Press [DVD MENU] and [CLEAR] keys in this order.
The data have been initialized when "Set Up Initialized" message is displayed. The EMG. History screen will be restored soon.

**How to see Emergency History**




① : Emergency Code
② : Don't Care
These codes are used for verification of software designing.
③ : Historical order 1 to 9
④, ⑤ : Emergency Code for only AV Decoder

Emergency Codes List
10: Communication to IC001 (TK board) failed.
11: Each servo for focus, tracking, and spindle is unlocked.
12: Communication to EEPROM IC201 (MB board) failed.
13: Writing of hours meter data to EEPROM IC201 (MB board) failed.
14: Communication to Servo DSP IC701 (MB board) failed, or Servo DSP is faulty.
20: Initialization of tilt servo and sled servo failed. They are not placed in the initial position.
21: Tilt servo operation error
22: Syscon made a request to move the tilt servo to wrong position.
23: Sled servo operation error
24: Syscon made a request to move the sled servo to wrong position.
30: Tracking balance adjustment error
31: Tracking gain adjustment error
32: Focus balance adjustment error
33: Focus bias adjustment error
34: Focus gain adjustment error
35: Tilt servo adjustment error
36: RF equalizer adjustment error
37: RF group delay adjustment error
38: Jitter value after adaptive servo operation is too large.
40: Focus servo does not operate.
41: With a dual layer (DL) disc, focus jump failed.50: CLV (spindle) servo does not operate.
51: Spindle does not stop.
60: With a DVD disc, Syscon made a request to seek nonexistent address.
61: With a CD disc, Syscon made a request to seek nonexistent address.
62: With a CD disc, Syscon made a request to seek nonexistent track No. and index No.
63: With a DVD disc, seeking of target address failed.
64: With a CD disc, seeking of target address failed.
65: With a CD disc, seeking of target index failed.
70: With a DVD disc, physical information data could not be read.
71: With a CD disc, TOC data could not be read.
80: Disc type judgment failed.
81: As disc type judgment failed, retry was repeated.
82: As disc type judgment failed, a measurement error occurred.
83: Disc type could not be judged within the specified time.
84: Illegal command code was received from Syscon.
85: Illegal command was received from Syscon.
E0: Mechanical error CDM53

Emergency Code List for AV Decoder
① D8: The "ACK" for command from AV Decoder IC401 (MB board) is no return.
D9: The "ACK" for command from Audio DSP IC501 (MB board) is no return.
DA: The "ACK" for command from AV Decoder IC401 (MB board) and Audio DSP IC501 (MB board) are no return.
DC: AV Decoder IC401 (MB board) can not operate inside.
DD: It is time out to operate by inside of AV Decoder IC401 (MB board).
② 01: The cause is Audio DSP IC501 (MB board).
30: The cause is AV Decoder IC401 (MB board).
31: The cause is both AV Decoder IC401 (MB board) and Audio DSP IC501 (MB board).
③ 00: Occurrence of DVD disc.
01: Occurrence of VCD disc.
02: Occurrence of CDDA disc.

## 1-8. VERSION INFORMATION

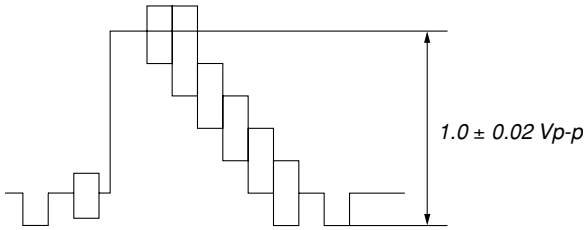
```
   ## Version Information ##

IF con.    Ver. x. xxx (xxxx)
           Group    00

SYScon.    Ver. x. xxx (xxxx)
           Model    xx
           Region   0x
    Servo DSP   Ver. x. xxx


Exit: RETURN
```

On the Test Mode Menu screen, selecting [5] displays the ROM version and region code.
The parenthesized hexadecimal number in version field is checksum value of ROM.

## 1-9. VIDEO LEVEL ADJUSTMENT

On the Test Mode Menu screen, selecting [6] displays color bars for video level adjustment. During display of color bars, OSD disappears but the menu screen will be restored if pressing any key.

Measurement point : VIDEO OUT jack
(75 Ω terminating resistance)
Measuring instrument : Oscilloscope
Adjustment device : RV401 on MB board
Specified value : 1.0 ± 0.02 Vpp



## REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

| Ver. | Date | Description of Revision |
|---|---|---|
| 1.0 | 2001.09 | New |
| 1.1 | 2002.03 | Correction of exploded views (Change the Ref. No.65 to 66). (SPM-02015) |
| 1.2 | 2002.05 | Addition of DISC TRAY ROCK function for servicing note. (SPM-02021) |
| 1.3 | 2002.07 | Addition of service position. (SPM-02058) |
| 1.4 | 2002.10 | SUPPLEMENT-1 : DVD test mode. (SPM-02090) |
| 1.5 | 2002.10 | Parts No. added for SUPPLEMENT-1 (9-873-314-81). |
| 1.6 | 2003.01 | Change of optical pick-up.<br>Note addition in the optical pick-up exchange. (SPM-02121,SPM-03003) |
| 1.7 | 2003.02 | Change of the above note. (SPM-03005) |
| 1.8 | 2003.12 | Addition of Ref. No.73 and 74 for exploded views. (SPM-03091) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

# SS-DP800AV/DP900D/ DP1000D/VP800AV

# SERVICE MANUAL

**Ver.1.1 2002.03**

*E Model*
*Australian Model*
*Tourist Model*

This set is the speaker system in MHC-DP700/ DP800AV/DP900D/DP1000D/VP700/VP800AV.

## SPECIFICATION

| | |
|---|---|
| Speaker system | 3-way, 3-unit, bass-reflex type, magnetically shielded type |
| Speaker units | |
| Woofer: | 15 cm, cone type |
| Subwoofer: | 15 cm, cone type |
| Tweeter: | 5 cm, cone type |
| Nominal impedance | |
| SS-DP900D | 6 ohms |
| SS-DP800AV | 8 ohms |
| Dimensions (w/h/d) | Approx. 250 x 360 x 335 mm |
| Mass | Approx. 6.5 kg net per speaker |

Design and specifications are subject to change without notice.

# SPEAKER SYSTEM

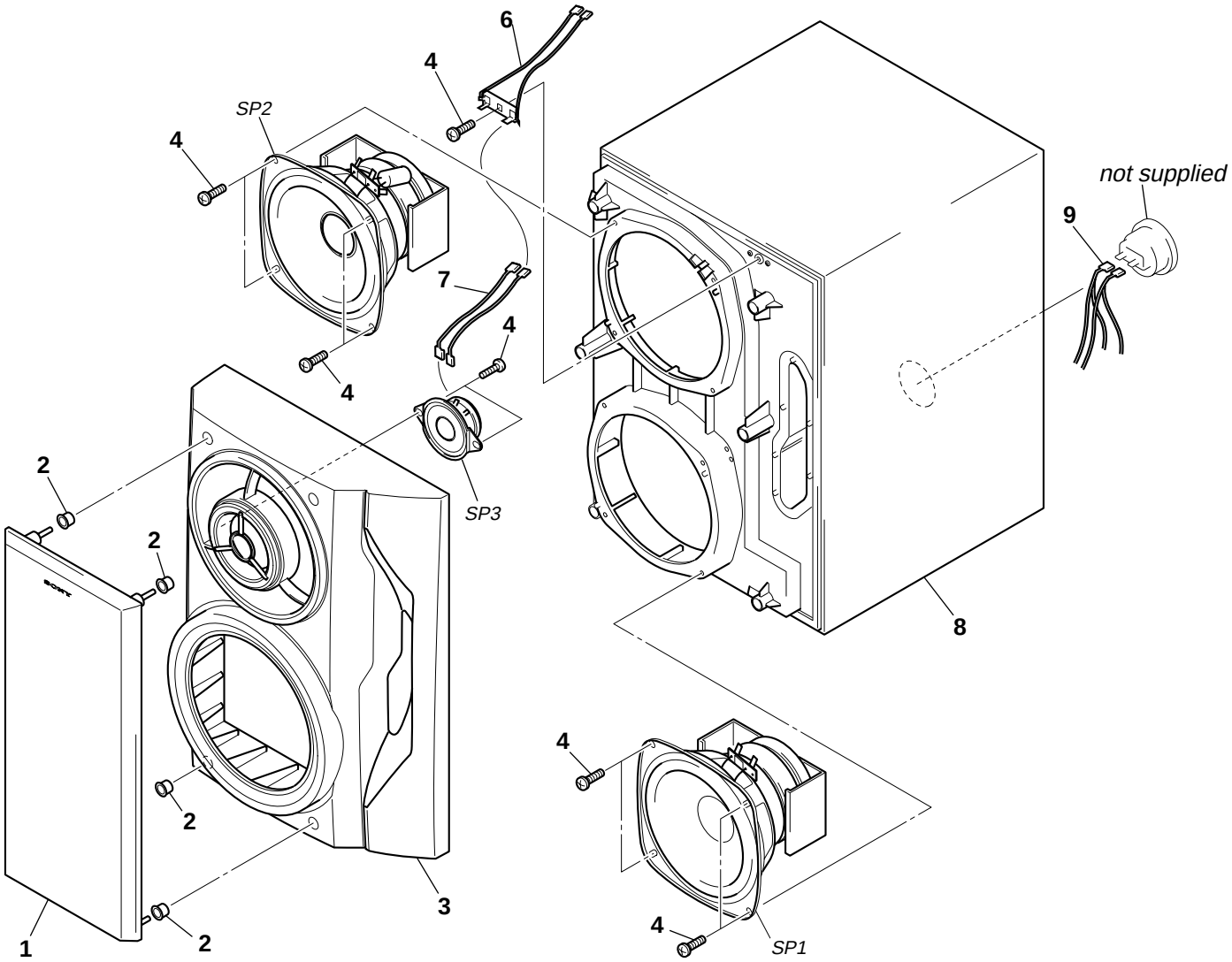
**9-873-881-12**
2002C0200-1
© 2002.03

**Sony Corporation**
**Home Audio Company**
**Published by Sony Engineering Corporation**

SONY®

## EXPLODED VIEW AND PARTS LIST

NOTE:
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Abbreviation
  EA : Saudi Arabia model
  TH : Thai model
  MX : Mexican model




| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 1 | A-4412-625-A | FRAME ASSY, GRILLE | |
| * 2 | 4-963-075-01 | CATCHER | |
| 3 | A-2004-832-A | PANEL (L) ASSY, FRONT(DP900D:E,EA/DP1000D:E,EA,MX) | |
| 3 | A-2004-833-A | PANEL (R) ASSY, FRONT(DP900D:E,EA/DP1000D:E,EA,MX) | |
| 4 | 4-874-614-21 | SCREW (4) (3.5X14), TAPPING | |
| 6 | 1-757-575-11 | CORD (WITH CONNECTOR) | |
| 7 | 1-792-577-11 | CORD (B) | |
| 8 | A-4412-627-A | CABINET (L) ASSY, SPEAKER (DP900D:E,EA/DP1000D:E,EA,MX) | |
| 8 | A-4412-628-A | CABINET (R) ASSY, SPEAKER (DP900D:E,EA/DP1000D:E,EA,MX) | |
| 9 | 1-792-576-11 | CORD (A) | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| SP1 | 1-529-950-11 | SPEAKER (15cm) | |
| SP2 | 1-529-969-11 | SPEAKER (15cm) | |
| SP3 | 1-529-951-11 | SPEAKER (5cm) | |

**********
ACCESSORIES & PACKING MATERIALS
**********
1-558-848-11 CORD, SPEAKER (3m)

*MEMO*

## REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

| Ver. | Date | Description of Revision |
|---|---|---|
| 1.0 | 2001.10 | New |
| 1.1 | 2002.03 | Addition of Saudi Arabia model for SS-DP900D. (ENG-02005) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

# SS-CT270/RC270/RS270

# SERVICE MANUAL

**Ver.1.0 2001.03**

Photo: SS-RS270

Photo: SS-CT270

SS-RC270 is packaged name
(SS-RS270 and SS-CT270).

*US Model*
*Canadian Model*
*AEP Model*
*UK Model*
*E Model*
*Australian Model*
*Tourist Model*

## SPECIFICATION

**SS-RS270**

| | |
|---|---|
| Speaker system | 1-way, 1-unit, bass-reflex type |
| Speaker units | |
| Full-range | 8 cm, cone type |
| Nominal impedance | 8 ohms |
| Dimensions (w/h/d) | Approx. 180 x 95 x 100 mm |
| Mass | Approx. 0.65 kg net per speaker |

**SS-CT270**

| | |
|---|---|
| Speaker system | 1-way, 2-unit, bass-reflex type magnetically shielded type |
| Speaker units | |
| Full-range | 8 cm, cone type |
| Nominal impedance | 8 ohms |
| Dimensions (w/h/d) | Approx. 225 x 95 x 100 mm |
| Mass | Approx. 1.2 kg net |

Design and specifications are subject to change without notice.

## SPEAKER SYSTEM

**9-873-860-11**
2001C0900-1
© 2001. 3

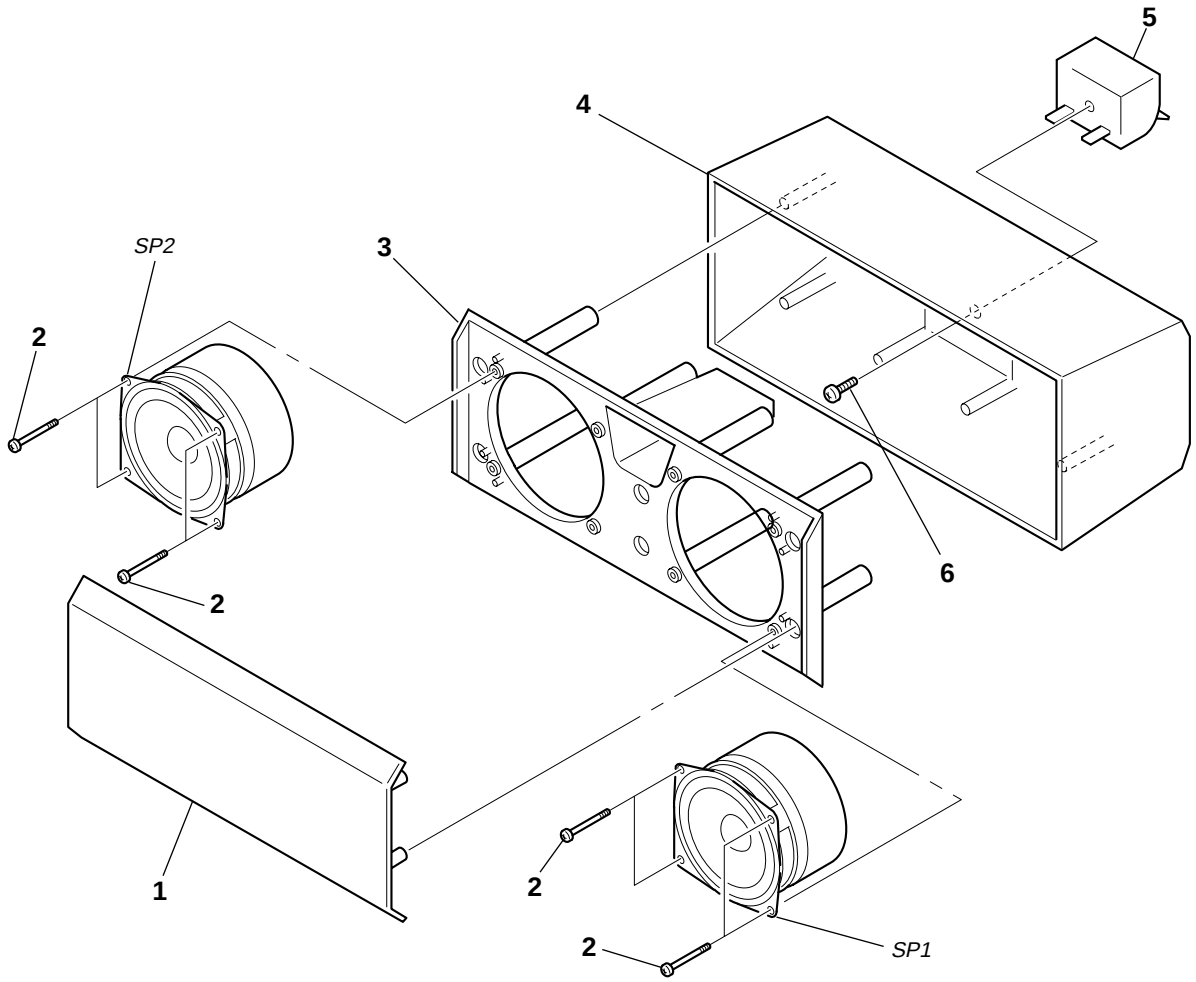
**Sony Corporation**
**Audio Entertainment Group**
**General Engineering Dept.**

SONY®

## EXPLODED VIEW AND PARTS LIST

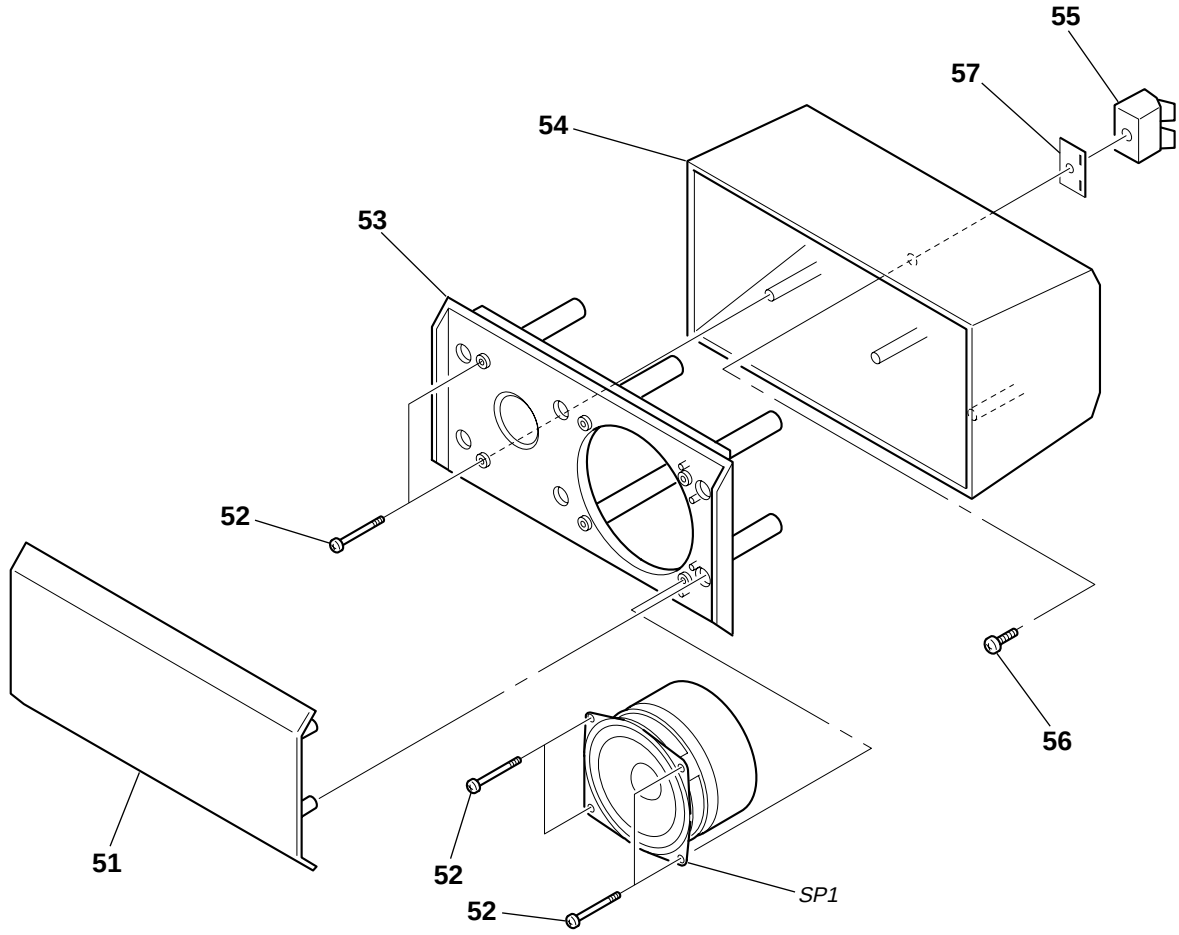
**NOTE:**
- The mechanical parts with no reference number in the exploded views are not supplied.

### • SS-CT270




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 1 | X-4953-893-1 | FRAME ASSY, GRILLE | |
| 2 | 4-978-600-01 | SCREW | |
| 3 | 4-221-063-11 | PANEL, FRONT | |
| 4 | X-4953-852-1 | CABINET ASSY | |
| 5 | 1-537-775-12 | TERMINAL BOARD | |
| 6 | 7-685-661-29 | SCREW +BVTP 4 X 12 TYPE2 SLIT | |
| SP1 | 1-529-983-11 | SPEAKER (8CM) | |
| SP2 | 1-529-983-11 | SPEAKER (8CM) | |

• **SS-RS270**




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 51 | X-4953-892-1 | FRAME ASSY, GRILLE | |
| 52 | 4-978-600-01 | SCREW | |
| 53 | 4-232-595-01 | PANEL, FRONT | |
| 54 | X-4953-876-1 | CABINET ASSY | |
| 55 | 1-694-516-11 | TERMINAL, SPEAKER | |
| 56 | 4-874-614-01 | SCREW (4) (3.5 X 14), TAPPING | |
| 57 | 4-229-803-11 | PACKING | |
| SP1 | 1-529-982-11 | SPEAKER (8CM) | |

## REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

| Ver. | Date | Description of Revision |
|---|---|---|
| 1.0 | 2001.03 | New |
| | | |
| | | |
| | |